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AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

ON

H.R. 3520/S. 1800

AN ACT MAKING APPROPRIATIONS FOR AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES PROGRAMS FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1988, AND FOR OTHER PURPOSES

PART 3 (Pages 1–625)

NONDEPARTMENTAL WITNESSES

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AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

MONDAY, APRIL 6, 1987

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met in room SD–138 at 3:05 p.m., Hon. Thad Cochran, presiding.

Present: Senators Stennis, Cochran, and Grassley.

NONDEPARTMENTAL WITNESSES

SUBCOMMITTEE PROCEDURE

Senator COCHRAN. The subcommittee will please come to order.

This afternoon, we continue with the hearings of the Appropriations Subcommittee for the Department of Agriculture and Related Agencies which come under the jurisdiction of this subcommittee. We will hear from witnesses who will help us to understand better the activities of the Department as they affect businesses, industries, production agriculture, and others that are directly affected by these programs. This is a very important part of the hearing process.

We are delighted to have a group of witnesses who are scheduled to testify. Many of them have appeared before the subcommittee before. We welcome all of you to the hearings and ask that you restrict your comments to a brief summary of your written testimony. Your statement will be included in full in the record, and it will be made available to all the members of the committee.

We cannot receive, for the record, any copyrighted material for publication unless arrangements have been made in advance to obtain the permission of the copyright owner to include that material in the hearing transcript. This notice is given to protect copyright owners, as well as the subcommittee and witnesses.

Let us begin our hearing with our first witness, Chip Morgan, our friend from the Delta Council of Mississippi. He is the executive vice president of that organization, and one of the finest citizens that we have in our state.

We are glad to have you with us, Chip, and you may proceed with your testimony.

DELTA COUNCIL

STATEMENT OF CHIP MORGAN, EXECUTIVE VICE PRESIDENT

Mr. MORGAN. Thank you, Senator.

For those in the audience who may not be aware of it, Mississippi is endowed with what we think are the two finest U.S. Senators in the Congress. I deeply appreciate being here today for this hearing.

My name is Chip Morgan, and I serve as the executive vice president of Delta Council, which is a nonprofit privately supported organization of business and agricultural leaders from northwest Mississippi.

For the benefit of the record, our organization represents an area that produces approximately 70 percent of the total agricultural production in the state of Mississippi, and the farm value of the crops grown in our region last year was approximately four times as large as the combined payrolls of all businesses and industries in the region last year. Agriculture is really the foundation of the economy for that region of the state, as the Senator is well aware.

Prior to offering my brief statement on behalf of Delta Council, Mr. Chairman, in support of our national thrust in agricultural research and education programs, I would like to depart from it for a brief moment and interject a few highlights about the economic conditions in the state of Mississippi.

Our state legislature is wrestling today with a budget crisis in terms of fulfilling basic services such as mental health, secondary and higher education, indigent health care, and the ability to conform to minimum standards for the incarceration of criminals in our state penitentiary system. All of these are essential state services, and none of them represent what we would perceive as luxuries in any state.

The local governmental entities—cities and counties—are facing an equally challenging situation in rural Mississippi, which is much like most of the rural areas of America in providing the basic and essential services like public education, municipal and county street repair, and even adequate police and fire protection are being threatened by the economic situation in Mississippi today.

Although we have heard, Mr. Chairman, that economic recovery has been occurring in recent years, Mississippi is not participating in this recovery. In fact, outside of the major metropolitan service and commercial centers, such as Dallas, Memphis, Jackson, MS, Nashville, Birmingham, and Atlanta, the economic indicators of the rural South are deplorable according to experts at our major universities at this time.

Dr. Ed Ranck, the state economist for the state of Mississippi, responded to questioning by members of the Mississippi Legislature who continue to look for an answer to the economic ills of rural Mississippi. Dr. Ranck, a Kentucky native and the chief economic analyst for all budgets in Mississippi's state government, responded by telling legislators that Mississippi will not experience recovery until agriculture has returned to the profit side of Mississippi's balance sheet. Dr. Ranck went on to state that agriculture income is the chassis on which Mississippi's economy rides.

In Mississippi, the basic services provided by our state government are supported by a sales tax, and at the county and local level by property tax, both of which are dramatically affected by the value of agriculture and the net worth of agriculture and agricultural income.

Any inefficiencies or inadequacies in terms of attracting economic activity other than agricultural production is generally passed on to farm property. In other words, like most any other region in rural America, when we are experiencing economic difficulties, the land and its ability to produce a value-added raw material becomes the only source for protecting the basic services of local and state government.

In our region of the country, agricultural research and education programs are considered essential to the basic welfare of our communities, counties, and states. The economic gains that have been realized through the development of agricultural technology and applied through crop production practices have become fundamental to our entire economic outlook in our state.

We believe that there is no greater American success story than public-private partnership between farmers and the public sector through our research programs at our land-grant institutions and the Agricultural Research Service at the USDA, which we think are doing an outstanding job.

Mr. Chairman, for the record, we would like to remind everyone that America does not have the best land or water resources on the globe. We don't have the most enviable climate in the world. Generally speaking, our farmers don't have any decided advantage in terms of basic know-how, intelligence or intellectual capabilities.

We believe that we simply must invest more of our nation's resources to agricultural research if we are to continue our superiority in production efficiency for the basic food and fiber needs of this country.

In conclusion, we would like to state that we are deeply concerned that the administration continues to recommend the reduction and elimination of some agricultural research programs that are so critical to the economic health of rural America.

We are grateful for the recognition, which this subcommittee continues to give to the value of agricultural research and education programs in this country, but we would like to send a signal to you at this time that a stronger commitment from our federal government is needed desperately in order for farmers in rural communities to sustain the challenges that we were speaking of earlier.

We believe that ARS and our land-grant institutions are performing a remarkable job with the resources that they have available to them. With approximately 2 percent of the total R&D budget of the U.S. Government being invested in agriculture, we think we are doing quite a bit of positive things for rural America, and the $1 trillion of assets that exist in agriculture today are being supported by the investments you make in research and education programs. We think it is very important for that to be mentioned.

Mr. Chairman, I will submit my written testimony, but let me end by saying that we are deeply appreciative of the subcommittee members and the full committee members.

Senator COCHRAN. Thank you very much, Mr. Morgan, for your excellent testimony, and for being here today to remind us of the importance of agricultural research and educational programs to the productivity and the efficiency of our production agriculture.

Senator Stennis, are there any questions or comments that you would like to offer at this time?

Senator STENNIS. Mr. Chairman, I certainly thank you. I am mighty glad that I had the chance to come here to hear this challenging testimony, and that is what it is, it is a challenge for us to take care of those at home. This is a fine group. We are proud of its achievements so far.

I don't know of anything that I have observed on this committee in the years that I have seen this operation that has brought more help than forestry research and other kinds of agricultural research. We are blessed back home to have fine young men like we have with us here today, and that is exactly what it takes. We want them to keep on doing what they are doing, and more, to increase the production.

Senator COCHRAN. Thank you, Mr. Chairman.

As everybody recognizes, Senator Stennis is the chairman of the full Committee on Appropriations, and he is an active member of the Subcommittee on Agriculture, and has been for quite a while. We are honored that he is here today, because he has a lot of other things that he could be doing. We are very happy that he is participating in this hearing today.

I don't have any specific questions except to say that I remember from past experience that the Delta Council likes to emphasize that the research being done with appropriated funds should have a great deal of emphasis on improving the efficiency of our agricultural production efforts. We have great concerns in the agriculture sector, and we ought not to ignore those problems as we go about allocating the research dollars to various projects.

I think that you can be confident that the subcommittee is going to urge the administration to use those funds in that way and try to reduce the cost of production so that we can become even more efficient than we are now in reducing the unit cost of our production.

I am sure that your policy has not changed. Would you like to respond to that? Is that still a major concern?

Mr. MORGAN. Yes; and it continues to be.

Mr. Chairman, in brief, we have seen that it becomes a lot more glamorous when many of the people in the scientific community can report biological and basic research emphasis on growing and emerging technologies in the basic biological sciences. We think that those things are very important. That long-term high risk research, as it is termed generally in the scientific community, is valuable.

But we don't believe, and we continue to be concerned that possibly while emphasis is being placed on more basic biological and scientific agricultural research, we may be losing some of our technological edge in the applied sciences, such as pest control, insects, weeds, diseases, and things of this nature.

It is not nearly as glamorous as some of the research objectives in the basic and biological sciences. We think that we have to keep our eyes on the road, and we will continue to drive toward increased efficiency, and the basic and biological research objectives will be even greater and greater in the long-term.

Right now, Mr. Chairman, we are wondering whether we are going to get production on next year's efficiencies. So the long-term high risk research, while it is valuable, will admittedly not bring the type of efficiency next year that the applied sciences will bring, and we want to continue the emphasis in that area.

Senator COCHRAN. Thank you very much. We appreciate your being here to testify.

[The statement follows:]

STATEMENT OF CHIP MORGAN

Thank you, Mr. Chairman.

My name is Chip Morgan, and I serve as executive vice president of Delta Council, which is a nonprofit privately supported organization of business and agricultural leaders from northwest Mississippi. Delta Council represents an area that produces approximately 70 percent of the total agricultural production in the state of Mississippi, and the farm value of the crops grown in our region last year was approximately four times as large as the combined payrolls of all businesses and industries in the region last year. Agriculture is not only the foundation, but it is also the basis of the entire network of our economy of our typical rural economy.

Prior to offering my statements on behalf of Delta Council in support of our national thrust in agricultural research and education programs, I would like to highlight a few of the economic conditions that exist in Mississippi today. Our state legislature is wrestling with a budget crisis in terms of fulfilling basic services such as mental health, secondary and higher education, indigent health care, and the ability to conform to minimum standards for the incarceration of criminals in our state penitentiary system. The local governmental entities, cities and counties, are facing an equally challenging situation in terms of providing the necessary support for public education, municipal and county street repair, and even adequate police and fire protection. Although we have heard that the nation is experiencing an economic recovery, we would like to report that every economic indicator in our region of the country, from the state economic outlook to the local economic activity clearly points out that we are not participating in any economic recovery. In fact, outside of the major metropolitan service and commercial centers such as Dallas, Memphis, Jackson, MS, Nashville, Birmingham, and Atlanta, the economic indicators of the rural South are deplorable, according to experts at our major universities. Dr. Ed Ranck, the state economist for the state of Mississippi responded to questioning by members of the Mississippi Legislature who continue to look for an answer to the economic ills of rural Mississippi. Dr. Ranck, a Kentucky native and the chief economic analyst for all budgets of Mississippi's state government, responded by telling legislators that Mississippi will not experience recovery until agriculture has returned to the profit side of Mississippi's balance sheet. Dr. Ranck went on to state that agricultural income is the chassis on which Mississippi's economy rides. In Mississippi, the basic services provided by our state government are supported by a sales tax that relies heavily upon our citizens' ability to purchase goods, and our local governments provide support for their services through taxes on property—which is almost exclusively agricultural land. Any inefficiencies or inadequacies in terms of attracting economic activity other than agricultural production is generally passed on to farm property. In other words, like most any other region in rural America, when we are experiencing economic difficulties, the land and its ability to produce a value-added raw material becomes the only source for protecting the basic services of local and state government.

In our region of the country, agricultural research and education programs are considered essential to the basic welfare of our communities, counties, and states. The economic gains that have been realized through the development of agricultural technology and applied through crop production practices have become fundamental to our economic outlook. We believe that there is no greater American success story than public-private partnership between farmers and the public sector through our research programs at the Land-Grant Institutions and the Agricultural Research Service-USDA. Cost-cutting research in plant and animal production in this country has made the U.S. agricultural industry the envy of all of our counterparts in the European Community and other developed societies. We should not forget that we do not have better land and water resources, we do not have a more temporate climate than some nations, and generally speaking, our farmers have no decided advantage in terms of basic intelligence or intellectual know-how—however, this country has reaped the benefits of the most efficient agricultural production industry on the entire globe due to the sustained commitment which Congress has made to agricultural research and education programs. We believe that we simply must invest more of our nation's resources to agricultural research if we are to continue our superiority in production effieiency for the basic food and fiber needs of this country.

In conclusion, we would like to state that we are deeply concerned that the administration continues to recommend the reduction and elimination of some agricultural research programs that are so critical to the economic health of U.S. agriculture. We are grateful for the recognition which this subcommittee continues to give to the value of agricultural research and education programs in this country, but we would like to send a signal to you that a stronger commitment from our federal government is needed desperately in order for farmers in rural communities to sustain the challenges that confront us at this time. ARS and our Land-Grant Institutions are performing a remarkable job in terms of the benefits that accrue to this country as a result of the small investment that our nation makes in agricultural research. With approximately 2 percent of the total R&D budget of the U.S. government spent to support the only industry in the world with more than $1 trillion of assets, this subcommittee should be proud of the record of the investments which you have supported in these vital programs.

Thank you for allowing me to appear before you today in support of increasing our support of the basic programs in agricultural research and education, and I will be happy to respond to any inquiries regarding specific elements in my testimony.

AMERICAN HOME ECONOMICS ASSOCIATION

STATEMENT OF DR. JOAN R. McFADDEN, EXECUTIVE DIRECTOR

Senator COCHRAN. Our next witness is Dr. Joan McFadden, executive director of the American Home Economics Association.

Welcome, Dr. McFadden, to our hearing. We are glad that you are here and ask that you proceed with your testimony.

Dr. MCFADDEN. Mr. Chairman and distinguished members of the committee, thank you for the opportunity to speak on behalf of funding for the Cooperative Extension Service of the U.S. Department of Agriculture. I am the executive director of the American Home Economics Association, an organization of more than 25,000 men and women with professional and technical expertise to help families learn skills that will enable them to solve the complex problems of everyday life.

To do this, home economics professionals integrate knowledge from the physical sciences and the social sciences as they teach families problem-solving and decisionmaking skills. Emphasis is placed on education for prevention of major family problems/crises rather than therapy after a crisis occurs. Programs contribute to the national priorities of economic stability and self-sufficiency.

The administration's budget proposal presented to the Congress in January 1987 recommends reduction in funds for the Cooperative Extension Service. The budget recommends that the special programs, including the Expanded Food and Nutrition Education Program [EFNEP], be terminated. I am here today to urge you to support continued funding for all areas of the Cooperative Extension Service.

I would like to share with you some information about current extension programs that focus on the role of the family in food, nutrition and health, financial management, personal and emotional well-being, and other family concerns that are national priorities.

Families are the thread that holds society together. The well-being of American families is essential to national strength since the values that underlie national stability are forged by families. Pressure brought to bear on families as a result of social and economic changes has made them an object of much concern. Through its home economics program, Cooperative Extension strengthens families by providing them with the knowledge and skills requisite to economic stability, physical health and personal and emotional well-being.

The competencies developed through the education experiences provided to families by Extension programs such as EFNEP enable individuals to be self-sufficient. Strengthening American families by teaching them to apply knowledge and develop skills has been a major mission of the Cooperative Extension Service's home economics programs since 1914.

Extension home economics delivers programs that address food, diet, health, resource management, personal consumption patterns, and the development of people and relationships. In many states, Extension is continuing to respond to farm family financial stress with a focus on both agriculture production and family life issues. Materials on farm family stress developed in one state have been adapted for use in other states where large portions of the farm population are experiencing severe stress due to farm financial issues. When the impact of shared resources is calculated, the initial investment has often been multiplied 5 to 10 times.

These programs have also contributed to agricultural productivity and competitiveness. In the 1980's, Extension programs emphasizing family well-being, including food, nutrition, health, family financial management, housing and leadership development, have made it possible for many families to become self-sufficient.

International trade practices have created a world economy that influences income patterns as well as the options families have for buying consumer goods. Families need to have the options interpreted and develop skills which make it possible for them to be contributing members of society.

The base for family economic stability is an income source and/or adequate financial planning. When the economic stability of a family changes, it is essential that family members develop new skills so they may reestablish a stable economic base. Extension is providing educational programs that help rural and urban families develop these skills.

The benefits of the shared funding of Extension programs are readily apparent. Every federal dollar is matched by $2 of state and local money which is a good investment. In addition, we can add to Extension's productivity the value of volunteer time. Extension funds are used to develop problem solving skills for participation in community development or management through the volunteer programs.

The Expanded Food and Nutrition Education Program is an effective method of providing nutrition education to low-income families with children. The paraprofessionals who do the teaching to the families have helped families change their lifestyles, and at the same time change their food consumption patterns.

In 1986, the number of families participating was 288,872, which represented approximately 1 million family members. The EFNEP paraprofessionals worked with other government agencies and other food assistance programs, 66 percent of the EFNEP families were food stamp recipients.

The program has changed. In the EFNEP program, they use innovative delivery methods and improve the cost-effectiveness of the program. EFNEP is a viable program and has a proven record of success. It is a program with a purpose. Families complete the program. The adults in participating families have earned GED's, college degrees, and have jobs. These people are now taxpayers and no longer depend on the welfare system. EFNEP paraprofessionals and families alike are on the ladder of opportunity to employment.

Finally, it is significant to reiterate the importance of the land-grant connection as it facilitates cooperation among the states. This, too, is a payoff. A formal nationwide network improves the efficiency with which resources are shared.

There are countless other payoffs from Extension home economics in terms of developing educational networks which are not as a result measured or described, but if you talk to your constituents, they can tell you Extension home economics makes a difference in their lives. Extension home economics programs impact 500,000 homemakers in the National Extension Homemakers Council alone.

The creativity in program delivery includes the sophisticated interactive video disc, video tapes, satellite-delivered programs, as well as problem-solving computer programs on nutrition, home insulation needs in energy education, and financial management. Newsletters are particularly effective in reaching new parents and parents of preschool children.

The President has expressed concern for strong, self-sufficient families. Federal Extension funds are essential to maximize human capital contributions. If people do not continue to develop skills to assure self-sufficiency in economics, health, and personal well-being, our society will experience greater costs as more families rely on assistance from federal, state, and local levels.

Specifically, we support an increase in the Smith-Lever 3 b and c funds under section 14 of the 1985 farm bill, consistent with the administration's recommendations for formula grants; and we support full funding for the Smith-Lever 3d funds under section 14 of the farm bill, which includes EFNEP at the 1986 level.

On behalf of the American Home Economics Association, we thank you for the opportunity to discuss the importance of Extension home economics programs and the critical nature of the federal support for these programs. We appreciate your support in the past and urge you to endorse these recommendations. I will be happy to answer your questions.

Senator COCHRAN. Thank you very much, Dr. McFadden.

You make a good point in your testimony, and that is that we have training programs and educational programs that are designed to help make families more efficient in managing their own problems, and that it ought to be recognized by the Congress that these funds that we appropriate for Extension home economics, for example, turn out to save money in some of the other programs and make the other dollars go further. The Food Stamp Program is an example of this.

In your program, you educate the family in the wise and efficient use of food, and you have done a great deal to help improve the nutrition and the health of that family. It probably saves on doctor bills, and in other ways makes a savings in government programs. I think that this is a point that does need to be made, and your testimony helps us to understand the practical side of this much better.

Senator Stennis.

Senator STENNIS. Thank you very much, Mr. Chairman.

This was excellent testimony, and I am glad that I was here to hear it.

Dr. MCFADDEN. Thank you very much.

Senator COCHRAN. Thank you for being here.

[The statement follows:]

STATEMENT OF DR. JOAN R. MCFADDEN

Mr. Chairman and distinguished members of the Subcommittee, thank you for the opportunity to speak on behalf of funding for the Cooperative Extension Service of the U.S. Department of Agriculture. I am the Executive Director of the American Home Economics Association, an organization of more than 25,000 men and women with professional and technical expertise to help families learn skills that will enable them to solve the complex problems of everyday life. To do this home economics professionals integrate knowledge from the physical sciences and the social sciences as they teach families problem solving and decision making skills. Emphasis is placed on education for prevention of major family problems/crises rather than therapy after a crisis occurs. Programs contribute to the national priorities of economic stability and self sufficiency.

The Administration's budget proposal presented to the Congress in January of 1987 recommended reduction in funds for the Cooperative Extension Services. The budget recommended that the special programs including the Expanded Food and Nutrition Education Program (EFNEP) be terminated. I am here today to urge you to support continued funding for all areas of the Cooperative Extension Service.

With this testimony I would like to correct any misunderstandings about Extension Home Economics priorities by sharing with you information about current Extension programs that focus on the role of the family in food, nutrition and health, financial management, personal and emotional well-being, and other family concerns that are national priorities.

Families are the thread that holds society together. "The well being of American families is essential to national strength since the values that underlie national stability are forged by families. Pressure brought to bear on families as a result of social and economic changes has made them an object of much concern." Through its Home Economics programs, Cooperative Extension strengthens families by providing them with the knowledge and skills requisite to economic stability, physical health and personal and emotional well-being.

The competencies developed through the educational experiences provided families by Extension programs such as EFNEP enable individuals to be self sufficient. Strengthening American families by teaching them to apply knowledge and develop skills has been a major mission of the Cooperative Extension Service since 1914.

Today, Extension Home Economics continues to make available to families research-based educational programs that encourage problem solving in terms of the economic, physical, and emotional well-being. Economic instability, and threats to values make it imperative that families develop the skills to anticipate change, direct change, and cope with change in ways that promote growth, productivity and strength rather than stress and failure.

From the early years of dealing with rural poverty to the threshold of the 21st Century, Extension Home Economics has delivered programs that address the pressure points in the American family--food, diet and health, resource management and personal consumption patterns, and the development of people and relationships.

For example, in many states Cooperative Extension is continuing to respond to farm family financial stress with a focus on both the agriculture production and family life issues. Materials on farm family stress developed in one state has been adapted for use in other states where large portions of the farm population are experiencing severe stress due to farm financial issues. When the impact of shared resources is calculated, the initial investment has often been multiplied 5 to 10 times.

Thus, while the educational programs provided in 1987 to address family life issues are quite different from those of 1915, they make it possible for families to assume responsibility for solutions to contemporary problems. These programs have also contributed to agricultural productivity and competitiveness. In the eighties, Extension programs emphasizing family well-being, food, nutrition, health, family financial management, housing and leadership development, have made it possible for many families to become self sufficient.

Critical Nature of Home Economics Extension Today

When the Land Grant Colleges were established by the Morrill Act of 1862, they brought a practical approach to education that linked the classroom and the campus to such objectives as national expansion. The linkage is still there, but the challenge today is to help families cope with communication technology, the information explosion, and the world economy.

In the early part of this century, the problem with education for adults was a lack of available information. One of the major facets of the Cooperative Extension program was that it provided "equal access to information" for rural families. Today Cooperative Extension programs continue to provide adults access to reliable information as well as develop the "thinking skills" that make it possible to apply objective criteria in decision making. Families can then select the alternative that is best for them.

International trade practices have created a world economy that influences income patterns as well as the options families have for buying consumer goods. Families need to have the options interpreted and develop skills which make it possible for them to be contributing members of the society. The base for family economic stability is an income source and/or adequate financial planning. When the economic stability of a family changes, it is essential that family members develop new skills so they may re-establish a stable economic base. Extension is providing educational programs that help rural and urban families develop these skills.

Individuals and families must have good information and be able to interpret it to effectively use their resources such as the food supply available from agriculture producers. Home economists help consumers understand the relationship of diet and health such as calcium and osteoporosis and the relationship between chronic disease and food consumption patterns such as diabetics. Agricultural producers need to understand the health related concerns of consumers and be responsive to the issues related to nutrition, concerns about additives and the microbiological safety of food. Home economics programs are making important contributions in this area.

Payback to the Society on Taxpayer Investment

The benefits of the shared funding of Extension programs are readily apparent. Every Federal dollar is matched by two dollars of state and local money which is a good investment. In addition, we can add to Extension's productivity the value of volunteer time. A recent program impact analysis conducted by the University of Wisconsin indicates that volunteers contribute 51 hours of time to Extension work for every hour of agent time.

Extension funds--Federal, state, and local--are used to teach volunteers how to teach others, to develop problem-solving skills for participation in community development or management and other support activities for educational programs. Without funding and the availability of leadership development programs provided by Extension Home Economics, volunteers are not likely to be available for the many roles they fill in communities throughout this nation.

More than 60 percent of volunteers report they have increased greatly their skills for peer teaching. Many volunteers use the teaching skills to teach other groups. As an example of this, in Indiana a budgeting program, "Saving Dollars When you Don't have a Dime," was taught 120 times to 3,800 volunteers by Extension Home Economists. The volunteers then taught the same lesson to 6,200 citizens throughout the state. An evaluation of the program found that 70 percent of the participants found ways to save money. The average saving was $283 per household. That translates to $1.9 million of flexibility in spending for the 70% of 7,000 households. This is a good return on an investment of approximately $3000, of which approximately $1000 was Federal money.

The Expanded Food Nutrition Education Program (EFNEP) established by Congress in 1968 provides another example of a program that changes the lives of the people who participate. EFNEP is an effective method of providing nutrition education to low income families with children. The paraprofessionals who do the teaching (many of whom have been in similar low income situations) have helped families change their lifestyles while at the same time, they have changed their own food consumption patterns. In 1986, the number of families participating was 288,872, which represented approximately a million family members. The EFNEP paraprofessionals worked with other government agencies and other food assistance programs; 66 percent of the families were food stamp recipients.

The program has changed through the years to use more innovative delivery methods and improve the cost-effectiveness of the program. EFNEP is a viable program and has a proven record of success. It is a program with a purpose; families complete the program. A record of the adults in participating families show that they earn GED's, college degrees and have jobs. These people are now taxpayers and no longer depend on the welfare system. EFNEP paraprofessionals and families alike are on the ladder of opportunity to employment.

Finally, it is significant to reiterate the importance of the Land Grant connection as it facilitates cooperation among the states. This too, is a payoff. Although cooperation may occur without formal networks, a formal nationwide network improves the efficiency with which resources are shared. For instance, in the North Central Region, a special project involved the Extension Family Life Specialists in Iowa, Michigan, Minnesota, Missouri and Nebraska to develop educational materials using the research base from a regional family stress project. Those materials have been duplicated and are being used throughout the North Central states and in other states throughout the nation.

There are countless other payoffs from Extension Home Economics in terms of developing educational networks which are not as easily measured or described, but if you talk to your constituents they can tell you Extension Home Economics makes a difference in their lives. Extension Home Economics programs impact 500,000 homemakers in the National Extension Homemakers Council alone.

Getting the Educational Program to the People

Extension Home Economists are providing programs to people where they are, regardless of geographic location, mind set, mental ability, or economic status. They connect local needs with national priorities.

The creativity in program delivery includes the sophisticated interactive video disc, video tapes, satellite delivered programs as well as problem-solving computer programs on nutrition, home insulation needs in energy education, and financial management. Newsletters are particularly effective in reaching new parents and parents of preschool children.

Self-study or correspondence programs have been effective in reaching farm families relative to stress management. In Iowa, more than 1800 families have participated in home study courses on farm family stress. As a result, they say they communicate more effectively, they are participating in more family activities, and are using exercise to help manage their stress. Over 1600 health professionals use the "Nutrition Concerns and Controversies" home study course. More than three-quarters report making one or more changes in their diet. Extension Home Economists have taught farm families how to start and maintain groups to provide emotional support during times of economic crisis.

Conclusion

The President has expressed concern for strong, self-sufficient families. That cannot happen in a vacuum. Federal Extension funds are essential to maximize human capital contributions. If people do not continue to develop skills to assure self-sufficiency in economic, health, and personal well-being, our society will experience greater costs as more families rely on assistance from Federal, state, and local levels.

Recommendations

We support:

1. An increase in the Smith Lever 3b & c funds under Section 14 of the 1985 Farm Bill, consistent with the Administration's recommendations for formula grants.

2. Full funding for the Smith Lever 3d funds under Section 14 of the Farm Bill, which includes EFNEP at the 1986 level, before Gramm-Rudman-Hollings.

Summary

On behalf of the American Home Economics Association, we thank you for the opportunity to discuss the importance of Extension Home Economics programs and the critical nature of the Federal support for these programs. We appreciate your support in the past and urge you to endorse these recommendations. I will be happy to respond to questions.

NORTH AMERICAN STRAWBERRY GROWERS ASSOCIATION

STATEMENT OF DOUG CARRIGAN, PAST PRESIDENT

Senator COCHRAN. Our next witness is Doug Carrigan. He is past president of the North American Strawberry Growers Association.

Dr. Carrigan, welcome to our hearing. We will make your written testimony a part of the record in full. We will ask you to proceed with whatever comments or summary statement you wish to make.

Mr. CARRIGAN. Thank you, Senator. It isn't Dr. Carrigan, it is just farmer Carrigan.

Senator COCHRAN. You are in the company of so many Ph.D.'s, I got carried away.

Mr. CARRIGAN. I am just a little fish in a big pond, it looks like.

Senator COCHRAN. You are very important to us.

Mr. CARRIGAN. I happen to be a fruit and vegetable farmer from North Carolina. I represent the North American Strawberry Growers Association. We have about 400 members in our association. We grow more than just strawberries, a lot of different fruits and vegetables.

Most fruits and vegetables in this country are produced on family farms such as mine. These are profitable farms. They don't have any government programs or subsidies for the things that we produce. But some of the basic tools of our business are good and productive varieties for strawberries, blackberries, raspberries, and blueberries, all those good fruits and vegetables that you and I enjoy, and the rest of the people in the country enjoy.

Every advance in the small fruit industry has come from the Agricultural Research Service. They have developed new varieties of stuff, and that creates a new advancement in the industry. ARS is the nucleus of our industry. We are very much in support of the funds that they have, and we want to continue them.

Last September, our group met at Beltsville, at the USDA headquarters, to tour the facilities and ask the Administrator what was going on. We saw facilities that are probably 40 years old, or better, but they still seem quite adequate at the time. However, it seems that they were lacking operating equipment to do the job that they had to do there.

We have gotten some good results out of it, and we have continued to get good results for the past 60 years. However, with additional funds, they could turn out quite a bit more production there. This would help our industry as well as the whole country.

I guess what I am really trying to tell you is that in our business there are certain needs that cannot be met on the local level, or the state level, but have to be met at the federal level. Some of these basic research programs, they can only be accomplished at the federal level.

We need new varieties that have genetic resistance, not chemical resistance. We have all kinds of controversial chemical use. This can only come from basic research, which cannot be done overnight. It takes quite a few years to incorporate this. Basic research that is done now will benefit us quite a few years down the road, but we can't sit still and wait for this to happen, we have to continually work at it.

If ARS could get additional funds, the small fruit industry and the entire country would benefit from this. We look to ARS to be the originators. We will become the innovators. We will become more efficient. You give us the raw materials, the basic tools to work with, and we will get very efficient and very productive.

Thank you.

Senator COCHRAN. Thank you, Mr. Carrigan.

Senator Stennis, do you have any comments or questions?

Senator STENNIS. I have no questions. This was a fine statement.

Senator COCHRAN. Mr. Carrigan, I think you have identified an important activity of the Department of Agriculture. I have been putting off going over to Beltsville, but I need to do that. For 6 years, I chaired this subcommittee. We had hearings and looked into what they do there. I have heard a lot about Beltsville, and I have read a lot about it. But, I have never done what you did, and that is go out there, walk around, get a tour, and find out exactly how they operate. I know that we appropriated funds every year for the past 6 for facilities there, as well as operating funds.

You think that they do a good job and they deserve support from the subcommittee; is that right?

Mr. CARRIGAN. Yes; I think they do a very good job, but I think that they could do a lot better. They have some basic facilities which are quite old. They have good personnel there. They could use a little more operating funds, and they could do great and wonderful things with them. They have a lot of good minds there, and that is the secret to it.

Senator COCHRAN. That is important. Thank you so much. We appreciate your testimony.

[The statement follows:]

STATEMENT OF DOUG CARRIGAN

SUMMARY

There are no subsidies or commodity programs for the small fruits, nor should there be.

Small fruits are an alternative for some farmers wishing to diversify their current farming operations.

The tax dollars spent on small fruits are very small relative to other agricultural crops.

Many of the small fruit research needs cannot be met on the local, state or industry level, but only through the federal level.

Basic priorities are genetic development of new varieties that incorporate productive capabilities with pest resistance. Our industry does have priorities that are reviewed on an annual basis and given to the respective researchers. A list of these can be provided upon request.

An additional funding of $500,000 to ARS would benefit government programs already in existence, many small fruit growers, and most importantly all the people of our country that enjoy small fruits.

BACKGROUND INFORMATION

Our organization was formed in 1978 to generate revenue from members to fund research not possible on individual farms. At least 25 percent of gross revenues are spent on research, last year $25,000 and over $100,000 in the last 4 years.

Our members are leaders in the small fruit industry. We are the example that others in farming tend to follow.

Small fruits produce more income on less acres. Gross sales per farm are in the top 20 percent nationally, but only one-third of the acreage of the average farm size, which is approximately 370 acres, is used to generate this income.

Small fruits add variety to our diets and greatly add to the quality of life.

Most small fruit production comes from small family farms in local communities with the average acreage in the 10- to 30-acre/crop range.

A large number of small fruit production is marketed "Pick Your Own." This not only gives the consumer the freshest possible fruits, but gives them an opportunity to experience production agriculture. Local production makes communities more self-sufficient.

ARS AND CRCS

Have provided variety development and disease resistance and pest control for 60 years in small fruit.

ARS is the nucleus of the small fruit industry. Every major small fruit advance has come from ARS. Without the research effort, there would be few small fruits available today.

ARS leads the research effort; it cooperates with the state land-grant universities.

Basic facilities are in existence at USDA in Beltsville, MD; however, with additional funding, these facilities could be utilized to a much greater degree. More operating funds should be available because they are extremely low compared to the overhead expenditures.

CHILDREN'S NUTRITION RESEARCH CENTER, BAYLOR COLLEGE SCHOOL OF MEDICINE

STATEMENT BUFORD L. NICHOLS, JR., DIRECTOR

ACCOMPANIED BY D. GAYLE McNUTT, DIRECTOR OF COMMUNICATIONS

Senator COCHRAN. Our next witness on the schedule is Dr. Buford L. Nichols. Dr. Nichols is the director of the Children's Nutrition Research Center at the Baylor College of Medicine in Houston, TX.

Welcome, Dr. Nichols.

Dr. NICHOLS. Thank you very much, Mr. Chairman. It is nice to visit again with you this year.

We are delighted to be able to report good progress. We are in the ninth year of Children's Nutrition Center operation. This is an Agricultural Research Service operation in joint agreement with Baylor College of Medicine to provide the access to the human subjects.

Our study relates to the need for information concerning the appropriate diet for children, infants, and their mothers.

The good news is that the funds that you have appropriated for us in 1984 for the construction of our new building are being well used.

I have Gayle McNutt, who is the director of communications at Baylor College of Medicine with me, and this is a picture of the building about 2 weeks ago. Right now there is a tree back in this corner. We are looking forward to entering this building around March 1988, in the next fiscal year.

We are certainly pleased and honored that you have seen fit to trust us with this opportunity, and we are looking forward to expanding the program in the next fiscal year.

I would like to just comment. Frequently, I am asked by people in agricultural production just how does human nutrition relate to agricultural production. It is not an easy question to talk about the diet and the various species of plant and animal production.

We are talking to these folks, and we are seeking ways to build bridges. One experiment we did this year was just absolutely fantastic. The ARS sent us over Beaumont rice raised in the laboratory. Working together, we were able to introduce a safe marker on the metabolism in the rice plants. Then we studied just exactly for that, the digestibility of that rice in small babies.

There was always a controversy as to how old a baby ought to be before you fed him any cereal. We have now conducted that kind of study. We are beginning to look at the different varieties of rice and their digestibility. This is not part of our program, but it is the kind of relationship between human nutrition and agricultural production that we hope to see grow in the context of our center in the future.

I want to thank you personally for your leadership on this committee. This committee has challenged our science. We do appreciate very much this great trust by the American people.

Senator COCHRAN. Thank you very much for your report, Dr. Nichols.

I notice, in the prepared statement that you submitted to the committee that the total request for fiscal year 1988 is $11 million, and this includes the expense of moving into the new building. Is this a federal outlay of $11 million? None of that is matched by any local or state money; is that right?

Dr. NICHOLS. This is a federal facility.

Senator COCHRAN. What did we appropriate last year?

Dr. NICHOLS. $5 million for an operational budget.

Senator COCHRAN. Will this be the final amount that will be needed to complete the construction of the building?

Dr. NICHOLS. Funds for the construction were appropriated in 1984. The building will not only be constructed with that appropriation, but scientific equipment will be provided.

The funds that we are addressing today are for increased operating funds for high quality science, to study the nutritional needs of pregnant women, to see if the diet influences the rate of low-birth weight, and premature birth. The other question is whether the diet can improve mental performance in school children.

Senator COCHRAN. Senator Stennis, do you have any questions?

Senator STENNIS. I have no questions.

Senator COCHRAN. We appreciate your being here conveying this information to us, giving us a report on the status of things, and bringing us a photograph to prove that it is really happening.

Dr. NICHOLS. Yes, sir.

Senator COCHRAN. It is a fine looking building that you have going up there. We will continue to follow this with a great deal of interest.

Dr. NICHOLS. I hope that you will have an opportunity to personally take a tour through that building within the next year.

Senator COCHRAN. That would be interesting. I would like that.

Dr. NICHOLS. We would like that.

[The statement follows:]

STATEMENT OF BUFORD L. NICHOLS, JR.

My name is Buford Nichols and I am Director of the Children's Nutrition Research Center at Houston, Texas.

Thank you for allowing us to appear before you today to testify about the progress of the Children's Nutrition Research Center and to explain our request for appropriations in Fiscal Year 1988.

We would also like to express our appreciation to you and the members of this Subcommittee for your support of the Center and its work. We believe that the progress of our research to date provides evidence of the importance that a scientific base can provide in helping our future citizens lead healthier, more productive lives.

We believe our findings also will be of extreme importance to our nation's agricultural community by providing guidance to our farmers and ranchers in developing and growing the varieties of crops and livestock that will best meet the nation's nutritional needs. We are also convinced that establishing a sound scientific basis for nutrition will assist our nation in continuing its leadership in world food production.

The Children's Nutrition Research Center has so far operated on a limited level as we have awaited the completion of our new, permanent facility. We will occupy that facility early next year. We are now prepared to move forward with establishing the programs to meet the research directive set forth by Congress in establishing this national center.

Today, I would like to briefly review the history of the Center, to summarize its major accomplishments, to give you an overview of the new facility and to outline our appropriation needs for the next fiscal year.

We will not attempt to fully implement all programs envisioned for the Center during this year because we do not feel that it will be possible to recruit top quality scientists and to implement all of the required research programs within a one-year span. We anticipate a phased-in approach over the next three years, which will allow an efficient and cost-effective program of implementation that would make the Center fully operational in Fiscal Year 1990.

Historical Background

Twenty years ago, Senator Young of North Dakota recommended that human nutrition research in the Agricultural Research Service be expanded in the United States. He envisioned four new Centers which would complement the original work begun by the Department in 1894 and continued at the Beltsville Agriculture Research Center. The Children's Nutrition Research Center was the third of the new Centers to be established. Since that time, the Center has successfully developed research concerning nutritional needs of lactating women and the special problems concerning the feeding of the young infant.

Center Accomplishments

Under the mandate of this subcommittee, the Center was established on November 3, 1978. The Children's Nutrition Research Center is the nation's only facility dedicated to the scientific definition of the nutritional needs to ensure health in the pregnant and lactating woman and in children from conception through adolescence. The Center is operated by Baylor College of Medicine , in cooperation with Texas Children's Hospital, for the USDA's Agricultural Research Service.

Research in the Center is designed to support the goals of the Department of Agriculture by developing national standards to:

- Determine how the diet of a pregnant woman affects her health and that of the child she delivers.
- Determine how the mother's nutrition affects lactation, the content of her milk, and the health of the child she nurses.
- Determine the relationship between nutrition and physical and mental development.
- Define dietary needs for healthy growth and development during childhood.
- Develop safe and effective means for nutrition research.
- Define standards for the nutritional assessment of children, and pregnant and lactating women.

Since 1979 the CNRC scientists have published 267 scientific papers and presented 210 scientific abstracts to research meetings.

Center Building

The new Center facility is being constructed on a one-acre site in the Texas Medical Center adjacent to Texas Children's Hospital. It is an 11-story building which will contain approximately 200,000 gross square feet of space and 123,000 net square feet.

- Seven floors will contain research laboratories for studies in nutritional biochemistry, body composition, and diet preparation. There will also be a laboratory for the development of stable isotope methodologies and a greenhouse for incorporating stable isotopes into plant foods.

- Twelve rooms will provide space for metabolic research volunteers (children and their parents) to live for varying periods of time during nutritional studies. Special diets for consumption by both live-in and live-at-home volunteers will be prepared in a research kitchen on the same floor. Calorimeters will measure energy expenditure of the volunteers.

- Animal care facilities for four species of animals designed in accordance with USDA/NIH guidelines. The animals will be used for nutrition studies.

- Administrative offices, building management offices, storage space and a public lecture hall for approximately 200 people will be provided.

- The structure is of reinforced concrete with the exterior in glass and granite. The facility will be completed, within the appropriated budget of $49 million, in March of 1988.

Center Program

The CNRC, now in its ninth year of scientific work, operates on a current budget of $5.0 million. With the move into the permanent facility for the Center, funding for two major program additions are requested:

PREGNANCY PROGRAM

The proposed Pregnancy Program is designed to study the nutritional needs of pregnant women and to determine how the diet affects the health of mothers and their children. The addition of this program will complete the USDA commitment to maternal and infant nutrition research from conception through infancy. The purpose of this program is to address the ways in which an improved diet can reduce the number of low birthweight infants. Such a program would be cost-efficient to the United States government. The research necessary to begin a national program to prevent low birthweight babies and to reduce consequent infant mortality is within the reach of the Children's Nutrition Research Center and within the mission of the U. S. Department of Agriculture.

BRAIN AND BEHAVIOR LABORATORY

Preliminary data indicate that diet influences brain development and mental performance in infants and children. This effect is most marked in the child living under adverse circumstances. Twenty percent of all children in the United States live in families below the USDA defined poverty level. In minority families, this approaches 50 percent. The Department of Agriculture supports major programs designed to assist with the food needs of this population. The purpose of this CNRC laboratory is to develop more effective methods of meeting the food needs of poverty-level children and to seek out ways in which better nutrition can improve the quality of life, both in childhood and adulthood.

With the addition of the Nutrition and Pregnancy Program in the Brain & Behavior Laboratory, it is projected that there will be 50 percent utilization of the new facility when it opens. A 100 percent utilization is envisioned by the 1990 Fiscal Year.

CENTER YEAR 1988 BUDGET REQUEST

Operating

Present Operating Budget	$ 5,000,000
Establishing Pregnancy Program	$ 2,000,000
Establishing Brain and Behavior Laboratory	$ 2,000,000
* Facility Operations	$ 2,000,000
TOTAL REQUEST	$11,000,000

* Includes move into new building.

Closing Remarks:

Mr. Chairman, this is a brief summary of the status of our Center and its needs.

On behalf of our entire staff at the Center, I want to express our appreciation for your support and the confidence placed in us by you and your Subcommittee and by the entire membership of Congress. We are confident that the results of our research in future years will fully justify the trust placed in us.

We are proud of what we have done so far, but we realize we have only begun.

Again, we appreciate the opportunity to make this presentation.

We will be glad to answer any questions that you may have.

Thank you.

THE AMERICAN VETERINARY MEDICAL ASSOCIATION

STATEMENT OF JOHN B. TASKER, DVM, PH.D., DEAN, COLLEGE OF VETERINARY MEDICINE, MICHIGAN STATE UNIVERSITY

Senator COCHRAN. Our next witness today is Dr. John Tasker, the Dean of the College of Veterinary Medicine at Michigan State University. He is representing the American Veterinary Medical Association.

Dean Tasker, welcome to the committee. You may proceed. Your written statement will be made part of the record in full.

Dr. TASKER. Mr. Chairman and Senator Stennis, thank you for the opportunity to appear before you on behalf of the American Veterinary Medical Association [AVMA].

The AVMA is the national association that represents 44,000 veterinarians in this country who have the responsibility for maintaining the health and life of livestock, poultry, and other animals, so that the agricultural economy can be strengthened, the public health can be enhanced, and the welfare of all creatures can be improved.

Working toward these objectives requires close collaboration of those in the private sector with those of us in higher education and in government. There are several sections of the budget for the U.S. Department of Agriculture that are of crucial importance for this work.

Those of particular importance are found in the budget for the Cooperative State Research Service, the Animal and Plant Health Inspection Service, and Food Safety and Inspection Service. I want to speak for a few minutes on each of these.

First, the Cooperative State Research Service. The profitability of animal agriculture in this country is significantly compromised by impaired health and poor reproductive efficiency of our farm animals. Research to find better understanding of these problems, and better methods for their prevention is necessary if we are to control these losses.

The farmers and ranchers of this country, and the veterinarians, look to the universities for this new needed knowledge, and yet there is very little funding available to support the work that must be done. The relatively small amounts that have been available through the Cooperative State Research Service in the past have been a vital sustaining force for animal health research.

We earnestly request that this funding be continued and increased in fiscal year 1988 and beyond. Since our written statement includes the specific items of special interest to us, I will not cover them at this time.

Next I want to speak of the Animal and Plant Health Inspection Service. The vitality of animal agriculture also depends upon the control of contagious, epidemic diseases of livestock and other animals. Preventing the importation of exotic animal diseases that would have a devastating effect on the agricultural economy, as well as working for the eradication of those diseases that are already endemic in this country are the responsibility of this service.

The American Veterinary Medical Association supports the funding of APHIS programs at not less than the amount recommended by the administration. More importantly, we strongly recommend the enforcement of the Animal Welfare Act, which is among the responsibilities of this agency, be increased substantially above those included in the administration's budget.

This act assures the public that the animals used in biomedical research in this country receive humane care and treatment. The amount proposed in the budget is woefully inadequate to fulfill the agency's responsibility.

The AVMA recommends an appropriation of at least $10 million for the enforcement of this act, with special emphasis being placed on the training of inspectors so that the act can be enforced in a consistent and equitable manner.

The Food Safety and Inspection Service has the responsibility for ensuring that the public has a safe and wholesome supply of meat and poultry. The increased incidence of bacterial contamination of meat products is slowly eroding consumer confidence in this inspection system, with repercussions both at home and abroad. It is essential that this service be funded adequately to fulfill its responsibilities effectively.

The AVMA endorses the recommendations of the National Association of Federal Veterinarians concerning funding for meat and poultry inspection. This includes $397 million for operation and establishment of a national education program to inform consumers about safety measures for handling red meat and poultry to prevent bacterial contamination.

The AVMA also believes that this program should be supported with federal funding and not through the institution of user fees to be paid by the industry.

Finally, the AVMA endorses a proposal being made to undertake a major new addition for research in food safety and animal health. We hope that such a program can be initiated in fiscal year 1988 at a funding level of $20 million.

There are close relationships between health maintenance practices in food producing animals and the wholesomeness of the food derived from them. The increasing concern of the public about bacterial contamination, drug residues in foods of animal origin requires that a considerable amount of research be done to gain an understanding of how and where this contamination occurs, what its medical significance is, and how it can be avoided.

Such research can address the potential problems that range from the production unit through the processing stages to the distribution system for these foods of animal origin.

This concludes my remarks. Once again, I want to thank you on behalf of the American Veterinary Medical Association for the opportunity to present our position to you today. We appreciate the challenges the subcommittee faces in the current budget environment. However, we do hope that you will recognize the importance of these programs to the health of the animal industry, and the health of the public as well.

Senator COCHRAN. Thank you very much, Dean Tasker, for your excellent statement and for your recommendations. Because of recently published statements, there is a good deal of interest being focused on salmonella. Some are concerned that maybe there is an unnecessary scare around the country on this subject. What is your reaction to that?

Do you have any view on whether or not the inspection system is adequate to protect the health and safety of the public—the consumers of meat and poultry products?

Dr. TASKER. I think that the Food Safety and Inspection Service is doing the best job that it possibly can with the resources it has available to it. There are certainly ways that this could be improved, and with adequate funding, I am sure that there will be improvements.

Senator COCHRAN. Senator Stennis, do you have any comments or questions?

Senator STENNIS. Thank you very much. I appreciate your statement very much. I am very appreciative of all these splendid people because they are intelligent and they know what they are talking about. Thank you very much.

Senator COCHRAN. Senator Grassley.

Senator GRASSLEY. Thank you, Mr. Chairman.

I have no questions. I just want to thank you for your testimony.

Senator COCHRAN. Thank you very much, Dr. Tasker. We appreciate your being here.

[The statement follows:]

STATEMENT OF JOHN B. TASKER

Mr. Chairman and members of the subcommittee, thank you for the opportunity to present the American Veterinary Medical Association's (AVMA) FY 1988 budget recommendations for the Department of Agriculture and related agencies. The AVMA is the national association that represents 44,000 veterinarians involved in all sectors of the economy that impact animal health. We recognize that the health of the nation's animal population directly affects our agricultural strength in both domestic and foreign markets, as well as the health of our people. Therefore, adequate funding for USDA's animal health and disease-related programs is essential to the continued productivity and profitability of American agriculture.

SUMMARY

In order to assure sustained competitiveness for animal agriculture and to promote both human and animal health, AVMA presents the following summary of specific funding recommendations for programs under the jurisdiction of the Department of Agriculture:

SUMMARY RECOMMENDATIONS FOR USDA PROGRAMS

Cooperative States Research Service	
* Hatch Act total funds	$ 173,792,000
* Animal Health (Section 1433)	6,400,000
* Animal Health (Special Grants)	6,666,000
* Minor-Use Animal Drugs (Special Grants)	240,000
* Biotechnology (Competitive Grants)	25,000,000
Animal and Plant Health Inspection Service	
* Animal Welfare Act	10,000,000
Food Safety and Inspection Service	397,000,000

AVMA also strongly rejects any decrease in support for the Food and Drug Administration's Center for Veterinary Medicine, an essential link for research and therapeutics in the animal and human health chain.

ANIMAL HEALTH AND DISEASE RESEARCH

Animal health and disease research programs have long suffered from a paucity of funds. Despite this, scientists have produced major breakthroughs in animal disease research that have in turn led to enhanced productivity for animal agriculture. In order for technological advances to continue at the ever more rapid rate that society demands, these programs must not only be continued, they must be expanded.

The first federal funding for animal health research in veterinary medical institutions, exclusive of that provided by the Agricultural Research Service, was a formula-based fund authorized under Section 1433 of the Food and Agriculture Act of 1977. Before 1979, a small amount of money was also available through the Hatch Act program, also a formula-based fund. It has been these small initiatives, coupled with additional animal health and disease research supported by special and competitive research grants programs, that have maintained our competitiveness in domestic and global markets.

Hatch Act formula grants are a major source of funding for animal health research. These federal formula-based funds establish the support base for many ongoing agricultural research programs. Together, animal health projects, agricultural experiment stations, veterinary science departments and some veterinary medical colleges receive only about 6.5 percent of the total Hatch funds available.

Section 1433 resources, like Hatch Act funds, also provide a large foundation for animal health and disease research at universities. More specific programs and projects, funded by mechanisms including competitive grants, draw upon this funding base. The formula used to allocate this money depends on a state's domestic livestock and poultry productivity, as well as the state's animal health research capacity.
Section 1433 money may be utilized in a variety of ways, in order to best serve the particular needs of the recipient institution. It may be used for exploratory research on local disease problems or to maintain herds of food animals for research.

The application of biotechnology to agriculture presents limitless opportunity. We cannot overemphasize the importance of enhancing the United States' leadership role in this arena. Most of the major scientific breakthroughs that gave birth to modern agricultural biotechnology were the direct result of basic research funded by USDA programs. AVMA supports efforts to place greater emphasis on biotechnological research and development. The competitive grants program provides an excellent avenue for reaching these goals.

AVMA recommends continuation of the special research grants program in its existing format, especially in the areas of animal health and minor-use animal drug research. Presently, we have few FDA-approved drugs for the prevention and treatment of disease in minor species of food-producing animals. The exorbitant costs associated with the drug development and approval processes prevent animal pharmaceutical manufacturers from developing applications for minor species, where the likelihood of recovering development costs is small. A coordinated approach involving producers, the animal drug industry, federal agencies and the research community is urgently needed to alleviate this unfortunate and dangerous situation. The special grants program is an important component for the solution.

Intensified and expanded research is needed to identify and develop solutions to the most serious animal health problems. These disease conditions add to producer losses, thereby limiting efficiency in the production of animal products and raising the cost of animal products to consumers. The special grants program is also essential to this overall effort.

The substantial research contributions of veterinary colleges and veterinary science departments directly affect biomedical research in addition to fields related to agriculture. The impressive return on investment that animal health and disease research produces requires that you, the wise managers of our nation's resources, allocate additional funds in this direction so that our society may reap the boundless technological yields that await us.

GRADUATE EDUCATION

The diminishing number of top quality graduate students attracted to research in the food and agricultural sciences is a growing concern among veterinary medical and animal science educators. Insufficient funding of graduate fellowship programs deters quality students from considering animal health and agriculture-related research careers. Today's students are our investment in tomorrow's research and progress. Recognizing the necessity of ensuring our future leadership in research, AVMA strongly encourages expanding support for graduate fellowship programs.

FUNDING RECOMMENDATIONS

AVMA supports recommendations developed by the National Association of State Universities and Land Grant Colleges regarding the funding for animal health and disease research programs for FY 1988. We urge the subcommittee to support research and education at these levels so that our agricultural research community can continue to make progress toward control and prevention of the livestock diseases that hamper our livestock industries.

Specifically, we recommend appropriations of the following amounts:

*	Hatch Act total funds	$ 173,792,000
*	Animal Health (Section 1433)	6,400,000
*	Animal Health (Special Grants)	6,666,000
*	Minor-Use Animal Drugs (Competitive Grants)	240,000
*	Biotechnology (Competitive Grants)	25,000,000.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

The Animal and Plant Health Inspection Service (APHIS) has been instrumental in reducing and controlling livestock diseases that threaten agricultural productivity. In order to protect the nation's livestock and livestock export markets, it is essential that APHIS programs be funded at not less than the FY 1988 levels recommended by the Administration. AVMA believes that the President's budget recommendations will enable APHIS to continue the quality work it has produced in the past.

There is one notable exception to this recommendation. Although AVMA commends the Administration for finally including some funding for enforcement of the Horse Protection Act and Animal Welfare Act in its budgets, the amount proposed for animal welfare is woefully inadequate in light of the Agency's regulatory responsibilities. The 1985 amendments to the Animal Welfare Act necessitate that APHIS expand investigation and inspection activities that have never been executed fully, with personnel who are currently inadequately trained for their responsibilities. AVMA recommends a minimum appropriation of $10 million for the enforcement of the Act, with special emphasis to be placed on the training of inspectors, so that the Animal Welfare Act may be enforced in a consistent and equitable manner.

FOOD SAFETY AND INSPECTION SERVICE

The Food Safety and Inspection Service (FSIS) has provided the nation with an uncontaminated, safe and wholesome supply of meat and poultry.

Increasing demands being placed on the inspection system and an increased incidence of bacterial contamination of meat and poultry products are slowly eroding consumer confidence in our inspection system, with repercussions both at home and abroad. Food safety cannot be compromised. The funding necessary to enable FSIS to conduct its inspection responsibilities effectively and to develop new inspection techniques must be provided.

AVMA endorses the recommendations made by the National Association of Federal Veterinarians concerning adequate appropriations for meat and poultry inspection. Our recommendations include $397 million for FSIS operations and establishment of a national education program to inform consumers about safety measures for handling red meat and poultry in order to prevent bacterial contamination. AVMA also encourages the subcommittee to appropriate funding for this program that benefits our whole society, rather than to recover costs from the meat and poultry industries through user fees.

This concludes our remarks. Once again, I would like to express gratitude on behalf of the American Veterinary Medical Association, for the opportunity to present our position here today. Mr. Chairman and distinguished members of this subcommittee, we appreciate the challenges that you face in the current budget environment. However, we trust that you share our recognition of the importance of the programs that we have described for you today. We know you will heed the concerns we have expressed and work diligently to fund these programs at levels that will help ensure our nation's continued health and economic well-being.

SPRING AND GROUNDWATER RESOURCES INSTITUTE

STATEMENT OF ROBERT PUTZ, DIRECTOR

Senator COCHRAN. Our final witness for our hearing this afternoon is Mr. Robert Putz, who is director of the Spring and Groundwater Resources Institute.

We welcome you to our hearing. We have a copy of the statement which you prepared for us. We thank you for that. We invite you to proceed and make any comments that you wish.

Mr. PUTZ. It is no secret that science and technology are no longer the export commodities that they once were for the United States. The need to bring government spending under control, the lack of early stimulation of our students in science and most important lack of focus and direction by the U.S. Government has led to what we consider the current state of stagnation.

Rather than point fingers, or cry the woes of whipped boys, let's look at this time period in our history as one of opportunity where our government can focus and once again be the cutting edge, the glue that binds, and the force that stimulates and guides the rest of us into a new era of scientific achievements and advancement.

One such area needing government focus is that of fisheries and especially aquaculture and fish farming. A recent review by the American Fisheries Society showed 37 federal agencies, of which 8 had major roles, to be involved in some aspect of this nation's fisheries, without what we consider to be appropriate or adequate focus or congressional overview.

A select committee composed of some of the best minds in fisheries is currently preparing an indepth study with strategies and recommendations as to what needs to be done at the federal level. This study will be presented to the U.S. Congress upon its completion.

Now let me be specific and discuss for a few minutes aquaculture and fish farming. I have watched for 28 years a slow and painful growth of aquaculture and fish farming in this country. Again I consider this to have been due to a lack of focus and clear legislative mandates by Congress for aquaculture. A slow shift toward positive growth started with the passage of the National Aquaculture Act of 1980.

Still the three major agencies—Interior, Commerce, and Agriculture—have been slow to assume the responsibilities that came with the passage of that act. For example, Interior, through the U.S. Fish and Wildlife Service, has had all the physical facilities and support scientists need to do research and development in the needed areas of fish disease identification, treatment and control, the formulation of nutritionally complete diets, genetic protocols and husbandry techniques in general. However, because the main mission of the service is taking care of critters in their natural environment, aquaculture activities were secondary, receiving no program focus, thrust or funding.

The Department of Commerce, through the National Marine Fisheries Service has been pretty much in the same boat placing aquaculture needs very low on their priority list.

The Department of Agriculture on the other hand has shown a desire to place a higher priority on aquaculture and fish farming, but they did not have any inplace facilities, programs, or scientific staff comparable to the other agencies. To achieve this status would have taken large appropriations and would have been great duplication of facilities and staffs.

Other than using this available soapbox, I have an esoteric reason for being here, and that is to bring to your attention a proposal I wish to be considered for funding by the Department of Agriculture's aquaculture program. This proposal would link fish culture to plant culture in a system capable of water reuse and the production of high value food fish and plant products that would lead directly to new agribusiness.

I am not really talking about catfish farming, which requires a large land base, high volume ground water and warm southern temperatures, but rather culture systems which use a small land base, small volume of water and can be used in Maine, Alaska, Florida, New Mexico, or any place in the world with a small amount of water, energy and a land base.

This is an aquaculture system linked to plant culture capable of greater than 95 percent water reuse that links hydroponics and drip irrigation to fish culture.

Why is it needed?

Over $4 billion of the nation's annual trade deficit comes directly from imported aquaculture products.

Combining the independent technologies of plant culture via hydroponic and drip irrigation with fish culture into a new agribusiness will strengthen the GNP through additional growth and diversity.

Many countries are relying more and more on aquaculture and less on capture fisheries for foodfish and related products because freshwater fisheries and the oceans' natural productivity are over-exploited, therefore, taking more and more energy to catch less and less tonnage.

Present aquaculture technology uses single-pass water flows through open raceways, ponds, or pen culture with water coming from sources such as wells, springs, streams, rivers, lakes, and coastal sea water. This is considered high volume water use.

As the world population increases, competition for the available wells will continue to decrease the water now available and used in traditional aquaculture/fish farming.

I feel the time is right to develop and apply improved methods for high value food production, especially those taking less water, energy, land, and labor; such as, fish culture integrated and linked with plant culture.

What are the obvious benefits of this type of aquaculture?

They will produce high value plant and aquatic animal crops while conserving water, energy, space, and labor. It will enable specialty out-of-season food production in any geographical region of the United States. It will promote greater agriculture diversity and regional independence.

For local educational institutions, to instruct and demonstrate, for potential users, a new food-producing science and technology.

It would eliminate point-source pollution from aquaculture effluents. I might say that at this point in time, it is one of the biggest problems in fish farming—what do you do with the effluent from the fish farms when you drain ponds down? You are putting a high level of nutrients out of the receiving waters that will not match up with the EPA effluent guidelines. You take those effluents from the fish and using the nutrient value for plant, and cleaning up this water before it goes out to point source discharge.

I think what I would like to do in closing, Mr. Chairman, is to read you a letter I received from Agriculture concerning this proposal.

It says:

The extent to which aquaculture develops further, especially when cold or cool water bases are considered, will largely depend on wise and efficient use of water resources. However, while the purpose of the proposal is timely, and the approach it identifies is sound, the Department has no appropriated funds available to support such an effort.

In closing, we have seen catfish culture, especially in Mississippi, Arkansas, Alabama, and Texas, grow from a few thousand pounds in the 1950's to almost 400 million pounds at this point in time. It has been very painful. We have not had the proper research and development necessary to move this forward at a faster pace. Thirty-five years is a long time to wait for that research and development.

Thank you, Mr. Chairman.

Senator COCHRAN. Thank you. I find your testimony very interesting. I find this linked system to be intriguing. I wanted to ask you if you have put any of this to work in any kind of demonstration project at this point?

Mr. PUTZ. There are small units that are being used, recycle/reuse systems just for fish, where the only makeup water you add is that that is depleted through evaporation. There are well known hydroponic systems and technology available for small fruits and berries, but nobody has taken all of this and integrated it into a simple systems approach, and that is what we propose to do.

You take the fish, the effluent, the protein material, the nutrients that are in suspension, clean it out, bring it through various different irrigations. It saves you the cost of the materials that you would use in the plant hydroponic situation because you are getting it from the fish.

Senator COCHRAN. This is a very interesting idea, I think. In our state of Mississippi, we have 92,000 acres under cultivation where we are growing catfish in enormous quantities. It has become big business, and 5,000 people are employed in that industry in our state. We have a lot of people who depend upon the continued growth and health of that industry.

This is an interesting operation, and we appreciate your taking the time to be with us today.

Senator Stennis, do you have any comment or question?

Senator STENNIS. I would like to commend the gentleman. I would like to have a copy of the statement he made, because I would like to pursue it.

Senator COCHRAN. Thank you for being here.

[The statement follows:]

STATEMENT OF ROBERT E. PUTZ

Summary of Testimony/Request

This is a four year research proposal to link fish culture with plant culture into a new agri-business. Aquaculture systems capable of greater than 95% water reuse coupled with hydroponics, drip irrigation and similar plant growth methods offer enormous opportunities for high-value food production, unique crops grown out of season and greater agriculture diversity. This propsed work will examine potentials, limitations, construct workable prototype systems and demonstrate their use and potential to the agriculture community. We are requesting funding from the Department of Agriculture's Aquaculture Program.

Mr. Chairman, Subcommittee Members:

It is no secret that science and technology are no longer the export commodities they once were for the United States. The need to bring government spending under control, the lack of early stimulation of our students in the sciences and most important a lack of focus and direction by the United States Government has led to this current stagnation. Rather than point fingers, or cry the woes of whipped boys, lets look at this time period in our history as one of opportunity where our government can focus and once again be the cutting edge, the glue that binds, and the force that stimulates and guides the rest of us into a new era of scientific achievements and advancement.

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Still the three major agencies (Interior, Commerce and Agriculture) have been slow to assume their responsibilities that came with the passage of that Act. For example, Interior through the U.S. Fish and Wildlife Service has had all the physical facilities and support scientists to do research and development in needed areas of fish disease identification, treatment, and control, the formulation of nutritionally complete diets, genetic protocols and husbandry techniques in general--However--because the main mission of the service is to look after critters in their natural environment, aquaculture activities were secondary...receiving no program focus, thrust or funding.

The Department of Commerce through the National Marine Fisheries Service has been pretty much in the same boat placing aquaculture needs, very low on their priority list.

The Department of Agriculture on the other hand has shown a desire to place a higher priority on aquaculture and fish farming, but they did not have any "inplace" facilities, programs, or scientific staffs comparable to the other agencies. To achieve this status would have taken large appropriations and would have been great duplication of facilities and staffs.

Other than using this available soapbox, I have an esoteric reason for being here, that is to bring to your attention a proposal I wish to be considered for funding by the Department of Agriculture's Aquaculture Program. This proposal would link fish culture to plant culture in a system capable of water reuse and the production of high value food fish and plant products which would lead directly to new agri-business.

I'm not talking about catfish farming which requires a large land base, high volume ground water and warm southern temperatures but rather culture systems which use a small land base, small volume of water and can be used in Maine, Alaska, Florida, New Mexico, or any place in the world with a small amount of water, energy and a land base.
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Many countries are relying more and more on aquaculture and less on capture fisheries for foodfish and related products because freshwater fisheries and the oceans natural productivity are over-exploited therefore taking more and more energy to catch less and less tonage.

Present aquaculture technology uses single-pass water flows through open raceways, ponds or pen culture with water services such as wells, springs, streams, rivers, lakes and coasted sea water. This is considered high volume water use.

World population increases with competition for the available water will continue to decrease the water now available and used in traditional aquaculture/fish farming.

The time is right to develop and apply improved methods for high value food production especially those taking less water, energy, land and labor such as fish culture integrated and linked with plant culture.

What are the obvious benefits?

Linked culture will benefit and/or be used;

1. To produce high value plant and aquatic animal crops while conserving water, energy, space and labor.

2. To enable specialty out-of-season food production in any geographical region.

3. To promote greater agriculture diversity and regional independence.

4. For local educational institutions to instruct and demonstrate for potential users a new food-producing science and technology.

5. To eliminate point-source pollution from aquaculture effluents.

6. For stand-alone, modular food-production systems for large scale commercial application or as a cottage industry.

Estimated Income from a small linked system using trout, tomato and small berries.
Need:

Approximately 3 acres
20 gallons per minute water flow
Six 4,500 gallon tanks (8' x 12')
One 20' x 100' greenhouse
2.5 acres of berries for outdoor drip irrigation

Estimated capital costs = $30,000

Production from the system
The system would support 8,000 lbs of trout per year at 90¢ per lb net or _ _ _ _ _ _ _ _ _ _ $7,200

Greenouse with 1,000 tomato plants at 8 lbs per plant at 54¢ per lb net or _ _ _ _ _ _ _ _ _ _ $4,320

2.5 acres drip irrigation with 28,000 berry plants yielding 6 lbs per plant at 15¢ per lb net or _ _ _ _ _ _ _ _ _ _ _ $25,000

Estimated net revenue $36,720

Mr. Chariman, Let me close by stating that;

1. There is technology available for producing trout
2. There is technology available for producing tomatoes and other vegetables hydroponically
3. There is technology available for producing fruit and berries via drip irrigation
4. There is not presently available a proven system which combines all the above into a commercially appliable and economic agri-business approach for either large scale or cottage industry use.

SUBCOMMITTEE RECESS

Senator Cochran. This concludes today's hearing. We appreciate very much the testimony that was offered here today to help us in our job of trying to determine the perfect levels of funding for all of the programs under the jurisdiction of this subcommittee.

Our next hearing for congressional and public witnesses will be held tomorrow in this same room, beginning at 9 a.m. Until then, the subcommittee stands in recess.

[Whereupon, at 4:03 p.m., Monday, April 6, the subcommittee was recessed, to reconvene at 9 a.m., Tuesday, April 7.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

TUESDAY, APRIL 7, 1987

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 9:06 a.m. in room SD–138, Dirksen Senate Office Building, Hon. Quentin N. Burdick (chairman) presiding.

Present: Senators Burdick, Sasser, Bumpers, and Grassley.

NONDEPARTMENTAL WITNESSES

SUBCOMMITTEE PROCEDURE

Senator BURDICK. The subcommittee will please come to order.

Good morning, ladies and gentlemen. Today, the subcommittee continues its hearings with congressional and public witnesses. These hearings give members of the public an opportunity to comment on the budget for the Department of Agriculture, and related agencies under the subcommittee's jurisdiction.

We welcome the comments that we receive. They will be helpful to us in determining the level of appropriations for these agencies.

I must remind the witnesses that the subcommittee cannot receive any copyrighted material for publication unless arrangements have been made in advance to obtain the permission of the copyright owner that those materials be included in the hearing transcript. This notice is given to protect copyright owners, as well as the subcommittee and witnesses.

I also want to remind the witnesses that we have a large number of witnesses and, therefore, have to limit the time for testimony. The statements of each witness will be made a part of the hearing record in full. Therefore, you are asked to summarize your testimony if it is lengthy. Each witness will be allowed 5 minutes for oral comments and it will be appreciated if you keep your eye on the stoplight up here and comply with the limitation.

We will now proceed with the first witness, Gary Puppe, executive vice president of the North Dakota Association of Soil Conservation Districts. Welcome to the committee.

NORTH DAKOTA ASSOCIATION OF SOIL CONSERVATION DISTRICTS

STATEMENT OF GARY PUPPE, EXECUTIVE VICE PRESIDENT, NORTH DAKOTA ASSOCIATION OF SOIL CONSERVATION DISTRICTS

ACCOMPANIED BY THILMER ISZLER, PAST PRESIDENT

Mr. PUPPE. Thank you, Senator.

Chairman Burdick and members of the Appropriations Subcommittee on Agriculture, Rural Development, and Related Agencies, it is a distinct pleasure for us to appear before this committee on behalf of the North Dakota Association of Soil Conservation Districts. Past President Thilmer Iszler and I appreciate this opportunity to express the concern and recommendations of our organization to the U.S. Senate.

As you are aware, the 62 soil conservation districts in North Dakota are governed by the 270 farmers and ranchers who are elected on the general election ballot. For over 50 years, these individuals, without any pay, have demonstrated genuine concern for the soil resources of our state and have sought federal assistance to help farmers and ranchers with their soil conservation problems. To an agricultural state, preserving the productivity of our soil is very high on our resource agenda.

If we were to examine the dimensions of our state, we would find it to be approximately 360 miles long, 230 miles wide, but on the average only 6 inches deep. Therein lies the future of a permanent production agriculture. It is that fragile 6 inches of our topsoil that must be protected and managed. It is in the local, state, and national interest.

For over 50 years, our North Dakota soil conservation districts have valued the programs administered by the Soil Conservation Service and the Agricultural Stabilization and Conservation Service.

Programs like the agricultural conservation program, waterbank, and Great Plains conservation program need to be maintained and funded for fiscal year 1988 and beyond. Mr. Chairman, these are basic, well-proven programs that should not be terminated. Rather, these programs need continued funding.

With the passage of the Food Security Act of 1985, new responsibilities have been added to USDA. These are important responsibilities for important programs and they need to be carried out. However, it is not appropriate to discontinue technical help to basic, well-proven programs, and concentrate the entire SCS technical staff on farm bill programs.

The North Dakota Association of Soil Conservation Districts believes that additional responsibilities added to SCS need to be accompanied by additional money and manpower. Directing the technical assistance to only farm bill programs in North Dakota means that less than 10 percent of the agricultural land will be able to receive attention with this form of administrative policy. We must also continue to maintain contact with producers on the other 90 percent of our agricultural land to be effective.

In a soil conservation effort, we need to look beyond 1988, 1989, and 1990. We need to continually persuade land operators, and offer them appropriate incentives to provide for the land's care and its future productivity.

Recently, we celebrated Ag Day in recognition of our farmers in this country. The Bismarck Tribune carried an editorial entitled "Start Planning Ahead for Ag Day 2087," a copy of that editorial is attached. It makes an important point that farm programs need to provide for the long-term benefits of conservation and good farming practices. We support that point.

Senator Burdick, thank you for the opportunity to appear before you today.

Senator BURDICK. Thank you very much.

I have one or two questions for you at this time.

Can you give the committee some examples of the type of soil conservation program plans that this administration is attempting to eliminate?

Mr. PUPPE. The three cost-share programs that we are interested in, Senator Burdick. The ACP, this particular program has been the backbone of cost-sharing for farmers and ranchers for years, share cropping, tree planting, grass seeding, and all these types of different practices that preserve the soil.

The waterbank program is an alternative for setting aside wetlands under 10-year contracts. This has been a well-recognized governmental program in North Dakota. The Great Plains conservation program allows farmers to enter into contracts for a period of 10 years with the government to do engineering work.

Senator BURDICK. The committee heard testimony from the Department of Agriculture recently. The Under Secretary for National Resources and the Environment said that the farmers don't have the proper soil conservation attitude, that the government has always done things for them for free. How do you react to this kind of statement?

Mr. PUPPE. Doing conservation on the land is not only an application, but there is maintenance as well. In fact, the people in North Dakota are bringing people from outside of the state to help them get the job done, and to carry out the farm bill provisions in the Food Security Act of 1985. So they are looking for additional help to get the job done.

Senator BURDICK. Do you know of anything more valuable to this nation than the 6 inches of topsoil?

Mr. PUPPE. It is pretty important, Senator. In terms of the farmers and ranchers, there is nothing that can top that as far as its value. It takes the land to keep us sustained.

Senator BURDICK. Thank you very much.

[The statement follows:]

STATEMENT OF GARY PUPPE

Chairman Burdick and members of the Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies. It is a distinct pleasure for us to appear before this committee on behalf of the North Dakota Association of Soil Conservation Districts. Past President Thilmer Iszler and I appreciate this opportunity to express the concern and recommendations of our organization to the U.S. Senate.

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If we were to examine the dimensions of our state we would find it to be approximately 360 miles long, 230 miles wide, but on the average only 6 inches deep. Therein lies the future of a permanent production agriculture. It is that fragile 6 inches of our topsoil that must be protected and managed. It is in the local, state, and national interests.

For over 50 years, our North Dakota soil conservation districts have valued the programs administered by the Soil Conservation Service [SCS] and the Agricultural Stabilization and Conservation Service [ASCS]. Programs like the Agricultural Conservation Program [ACP], Waterbank, and the Great Plains Conservation Program [GPCP] need to be maintained and funded for fiscal year 1988 and beyond. Mr. Chairman and members of this committee, these are basic well-proven programs that should not be terminated. Rather, these programs need continued funding.

With the passage of the Food Security Act of 1985, new responsibilities have been added to USDA. These are important reponsibilities for important programs and they need to be carried out. However, it is not appropriate to discontinue technical help to the basic well-proven programs and concentrate the entire SCS technical staff on farm bill programs. The North Dakota Association of Soil Conservation Districts believes that additional responsibilities added to SCS need to be accompanied with additional money and manpower. Directing the technical assistance to only farm bill programs in North Dakota means that less than 10 percent of agricultural land will be able to receive attention with this form of administrative policy. We must also continue to maintain contact with producers on the other 90 percent of our agricultural land to be effective.

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Recently we celebrated "Ag Day" in recognition of our farmers in this country. The Bismarck Tribune carried an Editorial entitled "Start Planning Ahead for Ag Day 2087." (see below) It makes an important point that farm programs need to provide for the long-term benefits of conservation and good farming practices. We support that point.

Senator Burdick and members of this committee, thank you for the opportunity to appear before you today.

START PLANNING AHEAD FOR AG DAY 2087

[From the Bismarck Tribune, March 22, 1987]

It's become customary to designate one or more days each March as an "Ag Day" celebration in recognition of America's farmers and the bounty of food they produce.

The message as always this year has been that we should not take this resource for granted, either in terms of the people who till the soil or the soil itself.

It is a message the U.S. government itself would do well to ponder.

All too often U.S. farm program policies promote abuse of the soil, even as other federal programs advocate conservation.

In the export market heyday a decade ago, the government encouraged farmers to plant "fencerow to fencerow" and some took them up on it, breaking up highly erodible hilltops and other fields that had been put into pasture long ago.

This year the government started a conservation reserve program, paying farmers to take some of this erodible soil back out of production. A caller to the Tribune criticized the program as rewarding those who have abused the land.

Maybe so, at least in some cases.

In hindsight, perhaps all that can be said is that we must make it a national policy to never sacrifice the long-term benefits of conservation for short-term economic gain.

Conservation and good farming practices, if encouraged by every farm program, will ensure the success of Ag Day 100, 200 and even more years from now.

AMERICAN ASSOCIATION OF CROP INSURERS

STATEMENT OF W.D. CLASSEN, CHAIRMAN

ACCOMPANIED BY RICHARD GIBSON, VICE CHAIRMAN AND PRESIDENT, AMERICAN AGRISURANCE, INC.

Senator BURDICK. Our next witness will be Mr. Bill Classen, chairman of the American Association of Crop Insurers.

You may proceed in any manner you wish.

Mr. CLASSEN. Good morning, Mr. Chairman.

I am W.D. "Bill" Classen, president of Rain and Hail Insurance Services and chairman of the board of directors of the American Association of Crop Insurers whom I am representing today. Accompanying me is Richard Gibson, president of American Agrisurance, vice chairman of the association.

Our association represents private insurance organizations that in 1986 wrote almost 75 percent of the private industry premiums that are reinsured and written through the Federal Crop Insurance Program.

Our primary purpose to appear today is to support the full funding and continued full federal financial support of the Federal Crop Insurance Corporation so that a maximum number of farmers can afford to purchase disaster protection on their growing crops through crop insurance in 1988.

This important package that was possible only with bipartisan efforts started a major shift in U.S. agriculture policy on disaster aid to crop farmers.

I am pleased to report that this unique partnership between the government and the private crop insurance industry to provide crop yield loss protection is working today better than at any time in the past 6 years. This is due in large part to the fact that the Federal Crop Insurance Corporation of the USDA for the past year has been under the direction of Manager E. Ray Fosse.

During Mr. Fosse's tenure, the program's operation and management has greatly improved. Constant changes in program direction have been replaced by an orderly well thought out process. Actuarial materials, which are necessary for agents to quote coverage and rates to farmers, are being published in a timely manner. The transition to coverage based on the individual grower's yield history, instead of the old county average coverages, is operating smoothly and efficiently.

The crop insurance program continues to be in a state of transition. The amount of growth acres insured has increased from about 22 million in 1978 to an estimated 61 million in 1986. We do caution, however, Mr. Chairman, that when Congress mandated low-yield disaster payments, as it did in 1986, it tends to confuse farmers in future years as to whether they should rely on crop insurance protection or a disaster aid program in the event of crop loss.

This transition of the crop insurance program coupled with the severe economic stress that many farmers are experiencing with the current crop market prices make it of vital importance that the Congress continue to support the program at the current levels.

The cost of supporting the crop insurance program at current levels continues to be a bargain for the taxpayer when compared to the program cost of other USDA disaster programs. We believe that if the level of government participation changes to any significant extent, especially during these times of low market prices, the program would likely fail and the government would be back into the business of making more costly ad hoc disaster payments. We estimate that the national average premium cost would increase from $4.68 in 1986 to about $19.83 per acre.

Today's crop insurance program has resulted in a good bargain for farmers and taxpayers. It is interesting to note that 1986 farmers will receive more gross dollars from crop insurance loss payments, estimated at about $596 million, than the mandatory disaster payment, estimated at $548 million.

However, after deducting the farmers' premiums, the net program cost for crop insurance is only about $311 million which is only about 57 percent of the program cost for the 1986 disaster payments.

Mr. Chairman, to continue the transition of the crop insurance program from what it was before 1980 to what it is becoming, we are testifying in support of the FCIC budget request for current legislation.

As an industry, we are concerned with the large federal deficit and commend the Congress for the steps taken to begin to set our government's financial house in order. We believe that the crop insurance program is essential to reducing farmer reliance on subsidies. This program is teaching farmers to buy disaster protection rather than rely on a government bailout.

We recognize that the FCIC must provide a strong program oversight and audit functions of the private companies to assure that the federal money is being handled properly. It is recommended that this unit apply the same strict review to both delivery systems to assure uniformity in the market place.

This unique partnership between governmemt and the private sector is both fragile and working. As an industry, we are committed to do all that we can to make this working relationship grow stronger in the future for the benefit of America's farmers.

Mr. Chairman, this concludes my statement. Mr. Gibson and I will be glad to answer any questions or furnish any additional information that you may desire.

Senator BURDICK. Thank you very much.

Mr. Classen, in your statement, you mention that the level of government participation in the crop insurance program was changed, participation by the farmers would be reduced.

Mr. CLASSEN. Mr. Chairman, first of all it would be a tremendous increase in the cost to the farmer if it was changed at this time, especially in view of the economic condition of our farmers out in rural America.

Senator BURDICK. The actual production history, the coverage was based on the yield rather than the county average. How is the plan working?

Mr. CLASSEN. Mr. Gibson will answer that, Mr. Chairman.

Mr. GIBSON. I think we had serious problems in the implementation of the actual production history to begin with, but the information now, according to the farmers, is that they are being informed by the agents on a very active basis relative to the qualifications and the necessary requirements of the program. I think that it is now being received very well by the farmer, who will now be able to receive a guarantee based on his actual production history as opposed to that of the country average.

Senator BURDICK. It is becoming more acceptable for the average farmer?

Mr. GIBSON. Yes, sir; I think they are much more acceptable because the farmer has the ability to produce the records for the history of his farming operation. Once he produces those histories, then they are taken, and they compare the actual production history. It goes forward and he will be much more willing to accept his history as to what his actual production is.

Mr. CLASSEN. I think, Mr. Chairman, that it recognizes better the average farmer, whereas the county average may be a certain level farming anticipated in that program. This does recognize all levels of farm management and farm productivity. It is a complex program, and we think that it takes a lot of computer time to keep track of all those records.

Senator BURDICK. Before I came to Congress, I was a lawyer, and we had a tough time. The farmers would come in with their facts and figures, and everything else. Do you think that the modern farmer keeps better records?

Mr. CLASSEN. I think that we have made a tremendous step forward in recordkeeping for many reasons. We started way back then to keep records. I don't think that it is 100 percent at this point, but it certainly has improved.

Senator BURDICK. Thank you very much.

[The statement follows:]

STATEMENT OF W.D. GLASSEN

I am W.D. "Bill" Classen, President of Rain & Hail Insurance Services and Chairman of the Board of Directors of the American Association of Crop Insurers whom I am representing today. Accompanying me is Richard Gibson, President of American Agrisurance, Inc. and Vice Chairman of the Association. Our Association represents private insurance organizations that in 1986 wrote almost 75 percent of the private industry premiums that are reinsured and written through the Federal Crop Insurance Program.

Our primary purpose to appear today is to support the full funding and continued full federal financial support of the Federal Crop Insurance Corporation, so that the maximum number of farmers can afford to purchase disaster protection on their growing crops through crop insurance in 1988. The federal government must continue to provide assistance to farmers for premium costs and administrative costs in this time of agricultural stress.

It is not necessary for me to spend much time to draw a picture for the committee on the serious economic stress that exists for many farmers today in rural America. And this is despite the fact that federal farm programs last year had a price tag of about $26 billion.

In 1980, the Congress passed a most important amendment to the Federal Crop Insurance Act. This important package that was possible only with bi-partisan efforts started a major shift in U.S. agriculture policy on disaster aid to crop farmers. It was the beginning signal that:

- Farmers should begin to look to the subsidized "self-help" crop insurance program to protect themselves against risks beyond their financial capacity to self insure, much like other businessmen have been doing for many years;

- Insurance programs were to be expanded so that almost all commercial growers of most major agricultural crops could purchase meaningful low-yield protection,

- Farmers at their own discretion could purchase multiple peril crop insurance either from the same private companies from which they purchased other farm insurance protection or could purchase government crop insurance policies.

- Taxpayers would begin to benefit by:
  * farmers relying on the new less costly self-help crop insurance program rather than the costly ad-hoc direct payments after disasters occurred, and
  * increased efficiency in the administration of the crop insurance program because of the participation of the more efficient private insurance industry.

I'm pleased to report that this unique partnership between the government and the private crop insurance industry, to provide crop yield loss protection, is working today better than at any time in the past six year history (the U.S. is the only country in the world where such a partnership is working). This is due in a large part to the fact that the Federal Crop Insurance Corporation of USDA for the past year has been under the direction of Manager E. Ray Fosse.

During Mr. Fosse's tenure, the program's operation and management has greatly improved. Constant changes in program direction has been replaced by an orderly well-thought-out process; actuarial materials, which are necessary for agents to quote coverage and rates to farmers, are being published timely manner; and the transition to coverage based on the individual grower's yield history, instead of the old county average coverages, is operating smoothly and efficiently. The end results of this improved working relationship can be measured by the farmers' increased use of crop insurance as illustrated in Exhibit A which is attached.

Today, like American agriculture, the crop insurance program continues to be in a state of transition. The number of county insurance programs has more than tripled (1980-86); the amount of gross acres insured has increased from about 22 million in 1978 to an estimated 61 million in 1986; Congress has held a relatively steady course in encouraging farmers to rely on crop insurance protection rather than mandating that the Secretary of Agriculture make mandatory disaster payments (except for the aberration of 1986); and the 1985 Farm Bill provides very firm linkage between the crop insurance program participation and emergency low-interest FmHA loan beginning with crops planted and harvested in 1987. We do caution you however, Mr. Chairman, that when the Congress mandates low-yield disaster payments as it did in 1986, it tends to confuse farmers in future years as to whether they should rely on crop insurance protection or a disaster aid program in the event of crop loss.

This transition of the crop insurance program coupled with the severe economic stress that many farmers are experiencing with current crop market prices make it of vital importance that the Congress continue to support the program at the current levels both through the:

- farmers' premium subsidy of up to 30 percent, and
- continued payment of the administrative costs to reduce the farmers' cost of protection.

The cost of supporting the crop insurance program at current levels continues to be a bargain for the taxpayer when compared to the program cost of other USDA disaster programs We believe that if the level of government participation changes to any significant extent, especially during these times of low market prices, the program would likely fail and the government would be back into the business of making more costly ad-hoc disaster payments. For example, if the government were to take the drastic step of withdrawing all support for the crop insurance program and adjust the premium rates to achieve the targeted .90 loss ratio using the experience of 1981-86 and to provide adequate administrative/operating expenses, we estimate that the national average premium cost per acre would increase from $4.68 in 1986 to about $19.83/acre. Estimates on a state basis are listed in Exhibit B and illustrated for selected states in the graph of Exhibit C, both of which are attached.

Such an adjustment in cost would greatly diminish farmer participation.

Today's crop insurance program has resulted in a good bargain for farmers and taxpayers. It is interesting to note that 1986 farmers will receive more gross dollars from crop insurance loss payments, estimated at about $596 million, than the mandatory disaster payment, estimated at $548 million. However, after deducting the farmers' premiums the net program cost for crop insurance is only about $311 million which is only about 57 percent of the program cost for the 1986 disaster payments. The crop insurance program cost also compares favorably to the government's interest subsidy cost on FmHA emergency low-interest loans which amounted to approximately $600 million for the period of 1981-86 for an average of $96 million annually. With the addition of the added cost for the high delinquency rate on such loans, they could easily approximate the program cost of the crop insurance program. The graph of Exhibit D illustrates the comparisons we just highlighted.

Mr. Chairman, to continue the transition of the crop insurance program from what it was before 1980 to what it is becoming, we are testifying in support of the FCIC budget request for current legislation.

As an industry, we are concerned with the large federal deficit and commend the Congress for the steps taken to begin to set our government's financial house in order. We believe that the crop insurance program is essential to reducing farmer reliance on subsidies. This program is teaching farmers to buy disaster protection rather than rely on a government bailout. However, we feel that certain cost reductions can be achieved within FCIC. We believe that current staffing levels of FCIC reflect the past needs of the agency when the government was writing 97% of the crop insurance business rather than the current situation where the government is writing only about 20%, the industry is writing about 80% of the business (see graph of Exhibit E).

We recognize that the FCIC must provide a strong program oversight and audit functions of the private companies to assure that the federal money is being handled properly. For this reason we recommend and support FCIC's development of a strong, objective and professional compliance unit. It is recommended that this unit apply the same strict review to both delivery systems to assure uniformity in the market place.

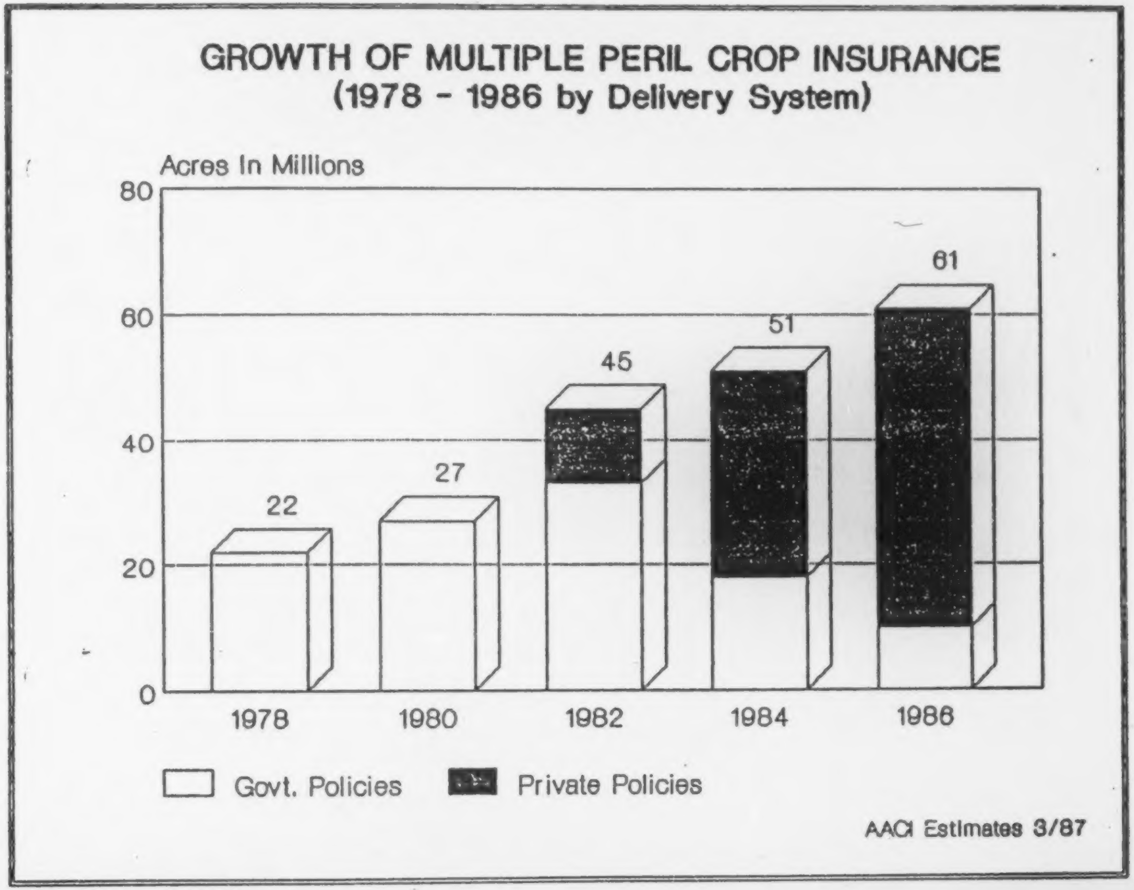
Much progress has been made in the crop insurance program in the past six years. But, it is by no means strong enough to require farmers to pay the full cost and expect the program to survive.

This unique partnership between government and the private sector is both fragile and working. The tangible result of this effort is that about 2 1/2 times as many crop acres were insured in 1986 than in 1980. As an industry, we are committed to do all that we can to make this working relationship grow stronger in the future for the benefit of America's farmers.

We would like to have to have the previously mentioned Exhibits inserted into the record, to the extent possible, along with Exhibit F which reflects the combined experience of 1981-86.

This concludes my statement. Mr. Gibson and I will be glad to answer any questions or furnish any additional information that you may desire.

[Exhibit A]



GROWTH OF MULTIPLE PERIL CROP INSURANCE
(1978 - 1986 by Delivery System)

AACI Estimates 3/87

[EXHIBIT B]

1986 MULTIPLE PERIL CROP INSURANCE ESTIMATES

	ALL WRITERS							IMPACT of SUBSIDY	
	Protection In Force (000)	Acres (000)	T.Premium (000)	Farmers' Premium (000)	Losses Paid (000)	Loss Ratio	Farmers' Cost/ Benefit Ratio	Farmers' Premium Cost/A. (w/sub.)	Farmers' Avg.Prem Cost/A W/O Sub.
AL	99,304	489	7,029	5,272	21,823	3.10	4.14	10.78	41.05
AK	21	8	2	2	0	0	0.00	1.20	1.99
AZ	9,274	49	761	571	640	0.84	1.12	11.65	43.12
AR	68,550	879	7,608	5,706	19,053	2.50	3.34	6.49	41.19
CA	256,250	559	19,300	14,475	27,682	1.43	1.91	25.89	71.09
CO	63,035	812	5,823	4,367	8,591	1.48	1.97	5.38	14.55
CT	1,354	1	71	53	10	0.14	0.19	53.25	53.25
DE	2,549	20	198	149	339	1.71	2.28	7.43	15.71
FL	130,404	196	9,674	7,256	12,827	1.33	1.77	37.02	101.66
GA	200,961	777	12,925	9,694	54,997	4.26	5.67	12.48	45.83
ID	48,537	396	2,706	2,030	6,347	2.35	3.13	5.13	22.22
IL	365,470	3,032	17,073	12,805	12,029	0.70	0.94	4.22	13.36
IN	190,424	1,426	9,471	7,103	9,746	1.03	1.37	4.98	16.31
IA	966,309	7,989	40,147	30,110	16,176	0.40	0.54	3.77	6.65
KS	245,922	4,166	17,176	12,882	21,112	1.23	1.64	3.09	10.47
KY	88,618	372	5,162	3,872	6,622	1.28	1.71	10.41	64.16
LA	67,731	671	7,201	5,401	19,627	2.73	3.63	8.05	67.29
ME	9,338	16	656	492	1,350	2.06	2.74	30.75	103.86
MD	5,419	35	374	281	905	2.42	3.23	8.01	16.48
MA	2,628	2	104	78	97	0.93	1.24	39.00	554.65
MI	28,335	141	1,728	1,296	11,633	6.73	8.98	9.19	58.79
MN	445,887	4,144	23,111	17,333	24,078	1.04	1.39	4.18	8.99
MS	66,988	653	7,535	5,651	25,999	3.45	4.60	8.65	49.88
MO	205,238	2,633	17,819	13,364	21,615	1.21	1.62	5.08	23.59
MT	324,191	6,202	23,349	17,512	42,512	1.82	2.43	2.82	24.60
NE	540,955	5,087	30,272	22,704	25,304	0.84	1.11	4.46	11.44
NV	145	1	11	8	0	0.00	0.00	8.25	63.68
NH	10	0	0	0	0	0.00	0.00	0.00	18.80
NJ	3,578	12	376	282	38	0.10	0.13	23.50	23.50
NM	6,163	109	680	510	1,366	2.01	2.68	4.68	22.41
NY	4,399	15	294	221	212	0.72	0.96	14.70	37.22
NC	369,987	703	14,799	11,099	31,089	2.10	2.80	15.79	60.19
ND	429,626	8,252	28,060	21,045	37,014	1.32	1.76	2.55	7.94
OH	79,155	590	4,104	3,078	3,468	0.85	1.13	5.22	16.06
OK	72,780	1,040	5,341	4,006	11,944	2.24	2.98	3.85	20.64
OR	36,471	587	1,337	1,003	1,309	0.98	1.31	1.71	2.84
PA	9,613	53	688	516	641	0.93	1.24	9.74	19.36
RI	142	0	14	11	41	2.93	3.90	0.00	56.41
SC	70,805	199	4,535	3,401	15,553	3.43	4.57	17.09	60.78
SD	91,588	1,551	6,885	5,164	5,796	0.84	1.12	3.33	8.33
TN	17,891	100	1,439	1,079	2,718	1.89	2.52	10.79	40.50
TX	306,246	4,353	29,474	22,106	63,994	2.17	2.89	5.08	33.32
UT	3,959	50	367	275	947	2.58	3.44	5.51	26.23
VT	709	2	66	50	69	1.05	1.39	24.75	21.46
VA	90,832	271	4,371	3,278	12,285	2.81	3.75	12.10	38.20
WA	139,639	1,868	6,605	4,954	12,824	1.94	2.59	2.65	6.75
WV	914	4	79	59	96	1.22	1.62	14.81	20.43
WI	32,061	150	1,654	1,241	1,774	1.07	1.43	8.27	16.30
WY	15,553	187	986	740	1,483	1.50	2.01	3.95	18.57
	6,215,958	60,852	379,440	284,580	595,775	1.57	2.09	4.68	19.83

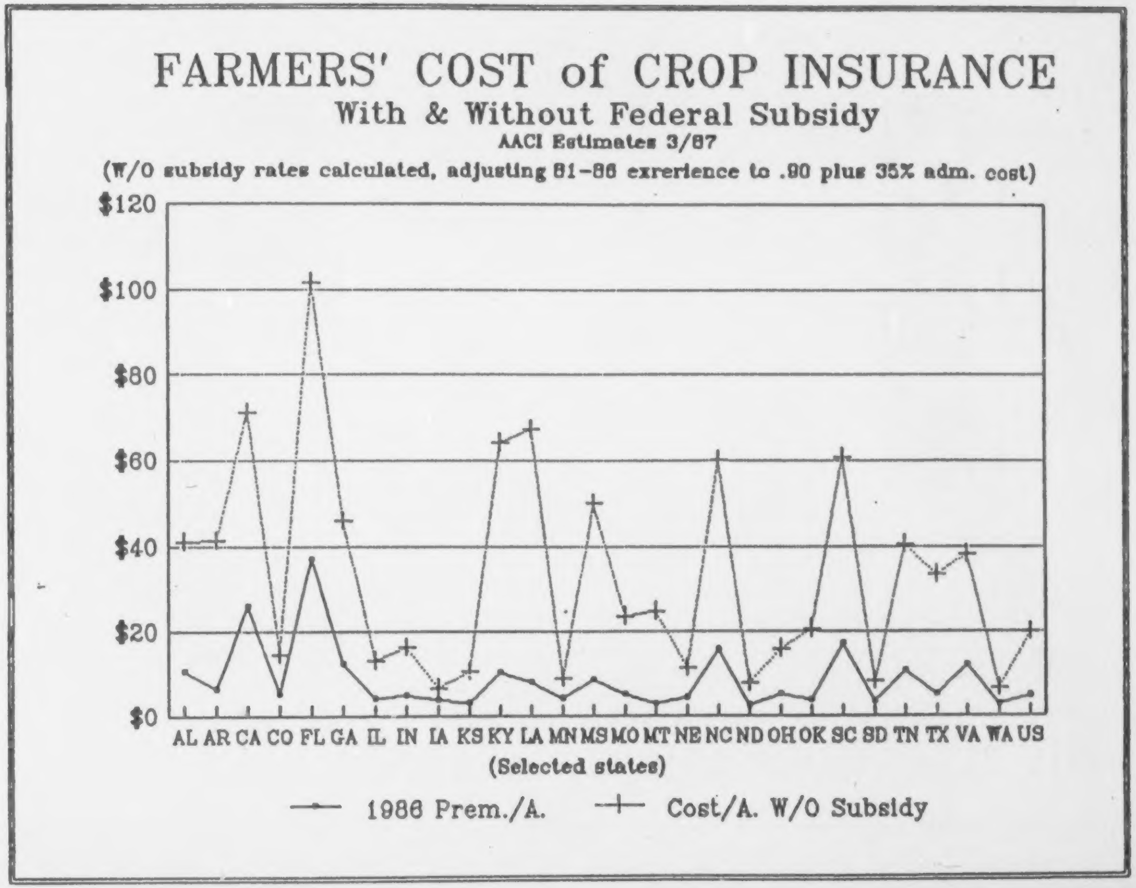
* Potential acreage based on FCIC indemnity estimates 1981-1986

** Farmers' estimated cost without subsidy is based on adjusting 1981-86 experience to .90 loss ratio and assuming a .35 expense rate (assuming a floor of not less then current rates).

*** Farmers premium = MP subsidy rates applied to FCIC business.

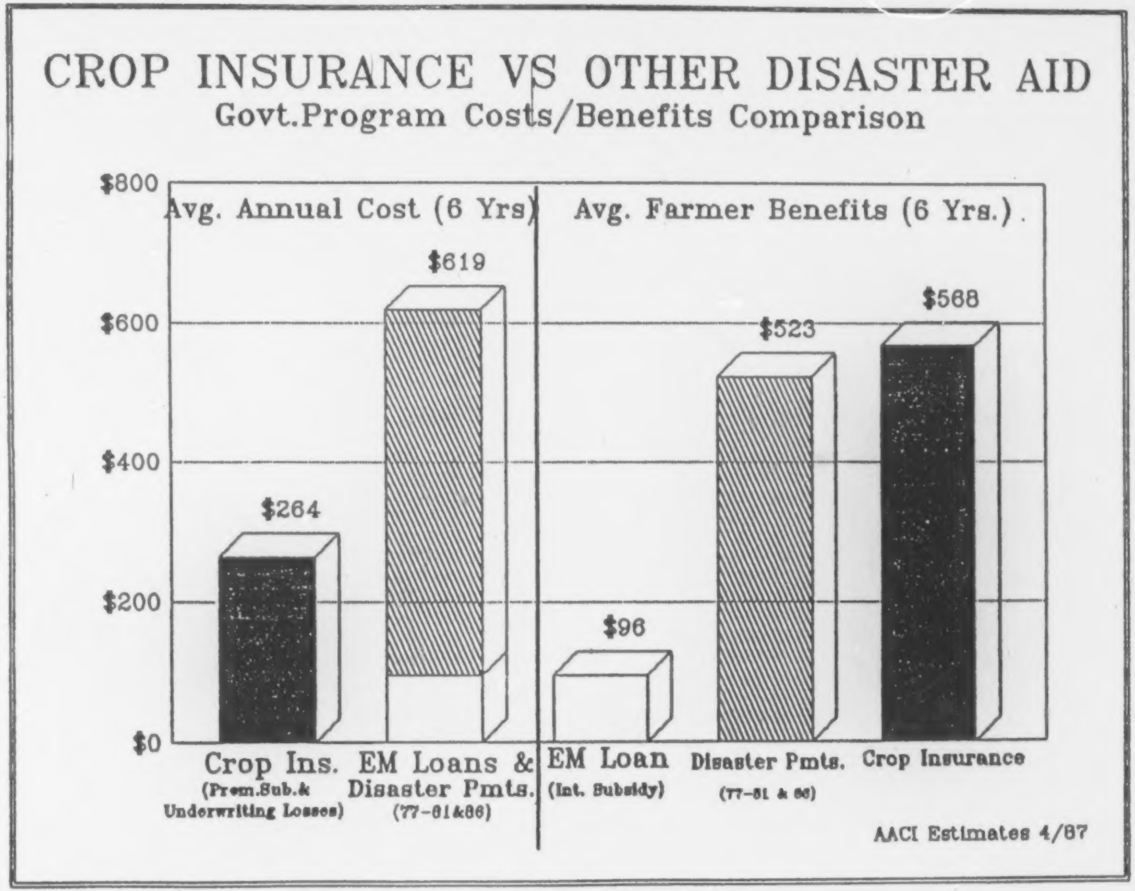
**** % mkt share prem = MPCI Prem / All Writers Prem

[EXHIBIT C]



FARMERS' COST of CROP INSURANCE
With & Without Federal Subsidy
AACI Estimates 3/87
(W/O subsidy rates calculated, adjusting 81-86 exrerience to .90 plus 35% adm. cost)

[EXHIBIT D]



CROP INSURANCE VS OTHER DISASTER AID

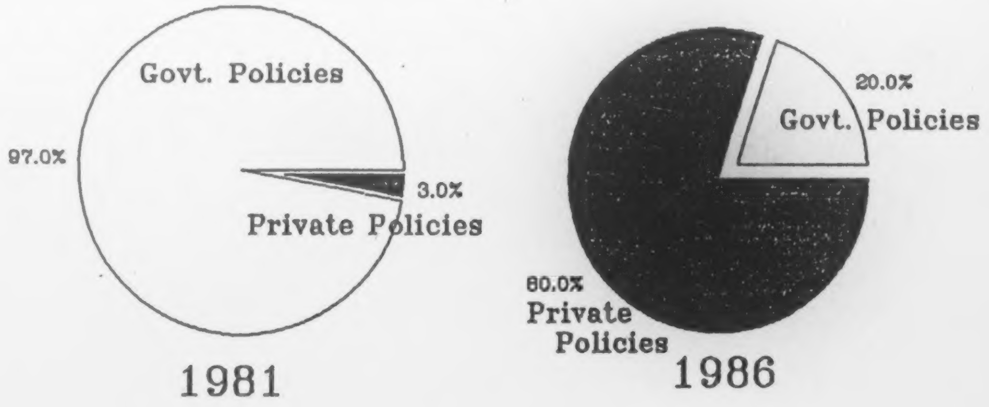
Govt.Program Costs/Benefits Comparison

AACI Estimates 4/87

[EXHIBIT E]

GROWTH OF PRIVATE COMPANY MARKET SHARE

Multiple Peril Crop Insurance



AACI Estimates Based on Premiums

[Exhibit F]

1981-86 MULTIPLE PERIL CROP INSURANCE DATA

	ALL WRITERS						
	Protection In Force (000)	Acres (000)	T.Premium (000)	Farmers' Premium (000)	Losses Paid (000)	Loss Ratio	Farmers' Cost/ Benefit Ratio
AL	743,334	4,247	58,492	46,311	101,996	1.74	2.20
AK	1,482	214	329	256	249	0.76	0.97
AZ	149,054	1,041	10,863	8,335	25,085	2.31	3.01
AR	830,676	6,026	74,413	58,802	152,014	2.04	2.59
CA	1,535,309	3,866	110,571	84,907	160,782	1.45	1.89
CO	272,350	3,638	29,558	22,049	30,963	1.05	1.40
CT	10,215	14	516	378	391	0.76	1.03
DE	22,501	161	1,676	1,334	1,480	0.88	1.11
FL	468,395	1,170	33,705	25,266	69,583	2.06	2.75
GA	1,595,763	8,099	114,473	92,844	217,118	1.90	2.34
ID	210,948	1,709	12,281	9,569	22,211	1.81	2.32
IL	1,558,588	11,099	73,045	57,420	86,725	1.19	1.51
IN	938,688	6,112	43,913	31,595	58,318	1.33	1.85
IA	4,994,171	34,890	222,926	179,596	135,792	0.61	0.76
KS	1,329,613	20,184	105,059	81,581	123,569	1.18	1.51
KY	846,230	1,889	37,149	29,502	70,904	1.91	2.40
LA	486,911	3,634	52,513	39,368	143,047	2.72	3.63
ME	52,284	96	3,081	2,406	5,833	1.89	2.42
MD	37,029	229	2,071	1,672	2,208	1.07	1.32
MA	9,913	17	2,341	1,814	5,516	2.36	3.04
MI	89,789	583	5,672	4,387	20,052	3.54	4.57
MN	2,249,939	19,771	137,681	108,015	103,942	0.75	0.96
MS	841,431	5,751	73,293	57,296	167,805	2.29	2.93
MO	1,008,919	9,624	81,907	62,712	132,806	1.62	2.12
MT	1,464,551	24,511	108,867	86,818	352,769	3.24	4.06
NE	2,730,747	22,143	162,331	128,801	148,203	0.91	1.15
NV	1,301	8	83	66	298	3.59	4.50
NH	447	3	28	22	33	1.18	1.50
NJ	13,655	84	1,202	970	908	0.76	0.94
NM	47,217	588	5,691	4,489	7,709	1.35	1.72
NY	38,396	141	2,597	2,094	3,070	1.18	1.47
NC	3,324,809	4,676	117,787	92,778	164,660	1.40	1.77
ND	2,714,657	44,407	206,985	162,735	206,158	1.00	1.27
OH	476,638	3,059	21,856	17,103	28,739	1.31	1.68
OK	366,682	4,828	30,526	23,396	58,289	1.91	2.49
OR	200,638	2,743	7,873	6,228	4,555	0.58	0.73
PA	75,441	423	5,391	4,353	4,791	0.89	1.10
RI	419	3	34	26	99	2.91	3.79
SC	766,025	2,282	46,631	36,601	81,134	1.74	2.22
SD	598,314	9,618	59,215	47,608	46,882	0.79	0.98
TN	223,781	773	13,835	10,779	18,316	1.32	1.70
TX	1,683,188	17,731	172,017	129,354	345,644	2.01	2.67
UT	11,961	167	1,131	881	2,563	2.27	2.91
VT	3,446	18	287	207	226	0.79	1.09
VA	755,940	2,025	35,123	27,800	45,248	1.29	1.63
WA	624,620	7,583	27,509	21,637	29,948	1.09	1.38
WV	4,503	21	338	255	251	0.74	0.98
WI	149,417	998	9,322	7,897	9,514	1.02	1.20
WY	73,953	763	4,766	3,671	8,290	1.74	2.26
Tot	36,634,278	293,660	2,328,953	1,823,983	3,406,686	1.46	1.87

AACI Estimates as of 3/87 using FCIC & CHIAA Data

* Potential acreage based on FCIC indemnity estimates 1981-1986

** Farmers premium = MP subsidy rates applied to FCIC business.

*** % mkt share prem = MPCI Prem / All Writers Prem

CONGRESSIONAL WITNESS

STATEMENT OF HON. ALBERT GORE, U.S. SENATOR FROM TENNESSEE

ACCOMPANIED BY JOE K. THOMAS III, PRESIDENT, TENNESSEE ASSOCIATION OF CONSERVATION DISTRICTS

Senator BURDICK. Senator Gore is our next witness from the great state of Tennessee.

Welcome, Senator Gore.

Senator GORE. Thank you very much, Mr. Chairman. I have a guest, Mr. Chairman, if he may join me at the witness table.

Mr. Chairman, thank you for your hospitality and willingness to allow me to testify this morning.

I would like to introduce to the committee Joe Thomas of Bristol, TN, who is president of the Tennessee Association of Soil Conservation Districts.

Joe Thomas is a farmer, and a community leader, a person with whom I have worked very closely on many of the issues that I will be discussing here briefly this morning, and that this committee deals with on a regular basis.

Mr. Chairman, I would like to begin by congratulating you on your leadership. Rural America and agriculture have no better friend or champion anywhere in this nation than you have been. These hearings show that additional evidence of your labors in their behalf.

Over the past 6 years, agriculture and rural America have gone through economic changes that were dramatic and nearly as severe as those that occurred during the Great Depression. Our heartland is reeling from bankruptcies and farm foreclosures in record numbers, unreliable farm programs, vanishing international markets and declining competitiveness, lower farm prices and vast commodity surpluses, and on top of everything else, government economic policies that are backward at best.

Much of rural America is on the verge of economic shock. In my home state of Tennessee, 9 out of 10 farmers gross less than $40,000 per year producing net incomes of less than $3,000 per year per farm. Most are lucky to break even to say the least. Some 1,200 farms are on the brink of bankruptcy or foreclosure, and another 5,000 to 8,000 face extreme difficulties.

Farmers, of course, are not the only ones to suffer. As you know very well, Mr. Chairman, the farm crisis hit the shopowners, the farm equipment dealers, bankers, in fact, probably everyone in town, except perhaps the auctioneer. Economic activity has ground to a standstill, turning bustling communities, in many cases, into isolated puddles of individual agony.

Rural Americans don't have to look far to find one of the main causes. This administration changed the rules. Under its guidance, a nation that once pledged to move forward together now seems ready to leave its roots behind.

Mr. Chairman, rural America is in trouble, and needs help fast. The kinds of programs that this committee has always endorsed and supported under your leadership, Mr. Chairman, are needed, and improvements in those programs are needed as well.

Quite simply, this nation must find a way to clear the underlying obstacles to economic progress, and this includes finding technologies that can respond to new and changing circumstances; management techniques that pave the way for alternative agriculture and low-input, low-cost systems; resource conservation programs to assure that rapid gains in farm productivity will not come back to haunt us later; and targeted assistance to help individuals keep ahead of a rapidly changing world.

Our plan should be clear. We must become competitive in foreign markets and encourage farmers to tailor their products to meet market demand while promoting domestic uses through innovative initiatives.

We must capitalize on the promising new tools of biotechnology, gearing them toward the small producers who need them most.

We must expand soil and water conservation efforts to protect our basic resources, and restore land cover for forestry, wildlife, and other uses but not at the expense of reducing those that have proven reliable in the past.

We must make an effort to deal with human stress in rural America, and do everything we can to get farmers and farm communities on their feet again.

We must provide adequate education and training or retraining for those who are being displaced due to changes occurring in agriculture and the rural community.

Finally, we must help American agriculture to achieve its principal aim, that of providing consumers a stable supply of nutritious food at a fair price.

Mr. Chairman, I would ask your permission to put the entire written statement that I have prepared for you in the record of this hearing. I would call your particular attention to a statement that I would like to underscore with respect to the necessity of adequate funding for soil and water conservation programs, and for the Agricultural Extension Service.

Based on a recent analysis by the National Association of Conservation Districts, more than 6,000 additional professional conservation personnel are needed to meet the increased workload. We have to meet our commitments under these programs, and I recommend adequate funding levels. Again, I will deal with the specifics for the record.

Rural America, Mr. Chairman, is at a turning point, and we must revitalize rural America. Rural communities have been dealt one blow after another. Rural America is home to 63 million Americans, one-third of our citizens, and they are the stewards of nearly 90 percent of our natural resources.

Mr. Chairman, the country cannot and must not leave rural America behind. I urge the subcommittee to support programs that will assist the rural communities and towns that serve farm families and other rural residents. We need successful demonstration projects, and we need an agenda to revitalize rural America.

In conclusion, I appreciate the opportunity to testify and I urge this subcommittee to maintain a viable interest in the research, education, conservation, and rural development needs of this country.

Mr. Chairman, Joe Thomas, whom I earlier introduced to the committee, has a statement, which we would like to provide for the record, if that is permissible.

Senator BURDICK. It will be made part of the record, without objection.

You are advocating a fine sounding program. This committee will do its best to keep in mind your parameters. Thank you very much.

Senator GORE. I appreciate it, Mr. Chairman, and Mr. Thomas does as well. We appreciate the chance to be here.

[The statements follow:]

STATEMENT OF SENATOR GORE

OVER THE PAST SIX YEARS, AGRICULTURE AND RURAL AMERICA HAVE GONE THROUGH ECONOMIC CHANGES AS DRAMATIC AND NEARLY AS SEVERE AS THOSE DURING THE GREAT DEPRESSION. OUR HEARTLAND IS REELING FROM BANKRUPTCIES AND FARM FORECLOSURES IN RECORD NUMBERS, UNRELIABLE FARM PROGRAMS, VANISHING INTERNATIONAL MARKETS AND DECLINING COMPETITIVENESS, LOWER FARM PRICES AND VAST COMMODITY SURPLUSES, AND ON TOP OF EVERYTHING ELSE, GOVERNMENT ECONOMIC POLICIES THAT ARE BACKWARD AT BEST.

RURAL AMERICA IS ON THE VERGE OF ECONOMIC SHOCK. IN MY HOME STATE OF TENNESSEE, NINE OUT OF TEN FARMERS GROSS LESS THAN $40,000 PER YEAR -- AND MOST ARE LUCKY TO BREAK EVEN. SOME 1200 FARMS ARE ON THE BRINK OF BANKRUPTCY OR FORECLOSURE, AND ANOTHER FIVE TO EIGHT THOUSAND FACE EXTREME FINANCIAL DIFFICULTIES.

FARMERS, OF COURSE, ARE NOT THE ONLY ONES TO SUFFER. THE FARM CRISIS HITS SHOP OWNERS, FARM EQUIPMENT DEALERS, BANKERS -- EVERYONE IN TOWN BUT THE AUCTIONEER. ECONOMIC ACTIVITY HAS GROUND TO A STANDSTILL, TURNING BUSTLING COMMUNITIES INTO ISOLATED PUDDLES OF INDIVIDUAL AGONY.

RURAL AMERICANS DON'T HAVE TO LOOK FAR TO FIND ONE OF THE MAIN CAUSES. THIS ADMINISTRATION CHANGED THE RULES. UNDER ITS GUIDANCE, A NATION THAT ONCE PLEDGED TO MOVE FORWARD TOGETHER NOW SEEMS READY TO LEAVE ITS ROOTS BEHIND.

RURAL AMERICA IS IN TROUBLE, AND NEEDS HELP FAST. NOT THE KIND THAT LIES BEHIND THE ADMINISTRATION'S PROMISES -- WHICH AS EVERY FARMER KNOWS BY NOW, ARE NEVER WHAT THEY SEEM. IT'S TIME TO LEAVE THOSE PROMISES BEHIND. WHAT RURAL AMERICA REALLY NEEDS ARE THE TOOLS TO SHAPE ITS OWN DESTINY.

Quite simply, this nation must clear away the underlying obstacles to economic progress. We must find:

** Technologies that can respond to new and changing circumstances;

** Management techniques that pave the way for alternative agriculture and low-input, low-cost systems;

** Resource conservation programs to assure that rapid gains in farm productivity will not come back to haunt us later;

** And targeted assistance to help individuals keep ahead of a rapidly changing world.

Only through better production, management, conservation, and marketing can American agriculture retain its place as our largest industry and the world's greatest provider. And only by winning back the trust of its rural communities will America regain the course set for us 200 years ago when a handful of farmers gathered in Philadelphia to make a nation.

Our plan should be clear:

** We must become competitive in foreign markets -- AND encourage farmers to tailor their products to meet market demand while at the same time promoting domestic uses through innovative initiatives.

** We must capitalize on the promising new tools of biotechnology, gearing them toward the small producers who need them most.

** We must expand soil and water conservation efforts to protect our basic resources, and restore land cover for forestry, wildlife, and other uses but not at the expense of reducing those that have proven reliable in the past.

** WE MUST MAKE AN EFFORT TO DEAL WITH HUMAN STRESS IN RURAL AMERICA, AND DO EVERYTHING WE CAN TO GET FARMERS AND FARM COMMUNITIES ON THEIR FEET AGAIN.

** WE MUST PROVIDE ADEQUATE EDUCATION AND TRAINING OR RETRAINING FOR THOSE WHO ARE BEING DISPLACED DUE TO CHANGES OCCURRING IN AGRICULTURE AND THE RURAL COMMUNITY.

** FINALLY, WE MUST HELP AMERICAN AGRICULTURE TO ACHIEVE ITS PRINCIPAL AIM -- PROVIDING CONSUMERS A STABLE SUPPLY OF NUTRITIOUS FOOD AT A FAIR PRICE.

AGRICULTURAL COMPETITIVENESS AND PROFITABILITY

AS THE LARGEST U.S. INDUSTRY, AGRICULTURE IS A KEY COMPONENT OF A COMPETITIVE NATIONAL ECONOMY. WE DEPEND ON ITS ECONOMIC AND ENVIRONMENTAL STABILITY.

THAT IS WHY AGRICULTURE MUST CHANGE ITS PERSPECTIVE FROM SHORT TERM FINANCIAL CONSIDERATIONS TO AN INTEGRATED APPROACH THAT WILL ASSURE STABILITY AND PROFITABILITY OVER THE LONG TERM. AN INTEGRATED SYSTEMS APPROACH WOULD BE BASED ON: THE APPROPRIATE USE OF NEW AND EXISTING TECHNOLOGIES; SOUND FINANCIAL MANAGEMENT; AGGRESSIVE MARKETING STRATEGIES; RISK ANALYSIS; AND SENSIBLE TRADE DECISIONS.

AT THE SAME TIME, GOVERNMENT MUST OFFER POLICIES AND PROGRAMS THAT FARMERS CAN COUNT ON AS THEY MAKE LONG TERM MANAGEMENT DECISIONS. FOR THE INDIVIDUAL FARMER, THIS APPROACH WILL INCREASE EFFICIENCY AND PRODUCTIVITY, CUT COSTS, AND MAXIMIZE TOTAL RETURN.

OVER THE PAST DECADE, DEVELOPMENTS WITHIN THIS COUNTRY AND WORLDWIDE -- RANGING FROM SHIFTS IN THE STRUCTURE OF AMERICAN

AGRICULTURE TO FLUCTUATIONS IN CURRENCIES ABROAD -- HAVE CAUSED VAST ECONOMIC HARDSHIP AND PERSONAL DISTRESS IN MANY RURAL COMMUNITIES.

IT WILL TAKE A MASSIVE EFFORT TO TURN THOSE TRENDS AROUND. I BELIEVE THAT BASIC PROGRAMS IN AGRICULTURAL RESEARCH, EXTENSION, AND EDUCATION ARE VITAL. THE PRESIDENT'S BUDGET PROPOSAL FOR FISCAL 1988 WOULD SELL THOSE PROGRAMS SHORT.

RESTORATION OF SCIENCE AND EDUCATION CAPACITY

I BELIEVE THAT IT IS ESSENTIAL TO RESTORE AND ENHANCE THE CAPACITY OF THE NATION'S AGRICULTURAL SCIENCE AND EDUCATION SYSTEM - A SYSTEM THAT PROVIDES THE FOUNDATION FOR AMERICA'S ECONOMIC STRENGTH AND PROSPERITY.

CONSIDER THE EFFECT OF BUDGET CUTS OVER THE PAST DECADE: BASE PROGRAM SUPPORT FOR EXPERIMENT STATIONS IN FY87 IS DOWN 16 PERCENT FROM THE 1978 FISCAL YEAR. EXTENSION FUNDING DROPPED 22 PERCENT -- AND THE PRESIDENT'S FY88 BUDGET PROPOSAL CALLS FOR ADDITIONAL CUTS OF 18 PERCENT IN RESEARCH AND 21 PERCENT IN EXTENSION FUNDING. YET, CIRCUMSTANCES CRY OUT FOR US TO EXPAND THESE PROGRAMS, NOT REDUCE THEM.

I FULLY CONCUR IN THE NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES' RECOMMENDATION FOR THE FISCAL 1988 BUDGET. MEETING THESE BUDGET REQUESTS ARE CRITICAL IN ADDRESSING NATIONAL ISSUES IN FOOD, AGRICULTURE, AND NATURAL RESOURCES. A COPY OF THE BUDGET RECOMMENDATIONS IS ATTACHED AT THE END OF MY REMARKS AS TABLES 1 AND 2.

ALSO ATTACHED IS A BACKGROUND PAPER ON THE COOPERATIVE EXTENSION SERVICE AND THE SPECIFIC IMPACTS THAT SOME OF THEIR ACTIVITIES ARE HAVING IN TENNESSEE. I WISH TO CALL SPECIAL

ATTENTION TO THE EXPANDED FOOD AND NUTRITION PROGRAM (EFNEP) WHICH HAS A POSITIVE IMPACT ON THE FOOD CONSUMPTION HABITS OF LOW-INCOME FAMILIES. THERE IS ALSO A SUCCESSFUL PILOT PROGRAM CALLED MANAGE THAT FOCUSES ON HOW TO MANAGE THE FARM BUSINESS, MANAGE FARM CREDIT, MANAGE FARM FAMILY FINANCE, AND MANAGE STRESS. THESE ARE BUT TWO OUTSTANDING EXAMPLES OF SPECIAL PROGRAMS THAT THE ADMINISTRATION'S BUDGET WOULD ELIMINATE IN ITS PROPOSAL.

I CERTAINLY DO NOT WANT TO OVERLOOK THE 4-H PROGRAM THAT HAS 170,000 TENNESSEE YOUTH ENROLLED AND PARTICIPATING. THESE YOUTH HAVE LEAD THE NATION IN SPECIAL HONORS AND AWARDS FOR THE PAST FIVE YEARS. ALL TENNESSEANS TAKE SPECIAL PRIDE IN THESE YOUNG PEOPLE AND THEIR ACCOMPLISHMENTS.

SOIL AND WATER CONSERVATION FUNDING

TODAY'S ACUTE ECONOMIC PROBLEMS MUST NOT BLIND US TO THE LONG-TERM IMPERATIVES OF RESOURCE CONSERVATION AND DEVELOPMENT -- INCLUDING WATER QUALITY ENHANCEMENT, WATERSHED PROTECTION AND FLOOD REDUCTIONS, EROSION CONTROL AND CONSERVATION PLANNING, AN INVENTORY OF OUR NATIONAL RESOURCES, AND TECHNOLOGICAL DEVELOPMENTS IN RESOURCE MANAGEMENT.

WE CAN'T AFFORD NOT TO EXPAND FUNDING FOR SOIL AND WATER CONSERVATION, IF WE WISH TO SOLVE THE ENVIRONMENTAL PROBLEMS THAT COME WITH AGRICULTURE AND RESOURCE UTILIZATION. SOME WOULD HAVE US BELIEVE THAT BEYOND A CERTAIN POINT, CONSERVATION NO LONGER MATTERS. BUT THE CONSERVATION BATTLE NEVER ENDS. PROGRAMS IN TECHNICAL ASSISTANCE, RESEARCH, EDUCATION, AND INFORMATION MUST BE INCREASED TO A LEVEL MORE IN KEEPING WITH THE MOST RECENT NATIONAL RESOURCE INVENTORY COMPLETED IN 1980. WE MUST UPDATE THAT INVENTORY EVERY FIVE YEARS, TO KEEP TRACK OF THE RESOURCES WHICH MAKE THIS COUNTRY STRONG AND PRODUCTIVE.

The wise management of agricultural and forested lands helps to maintain the quality of surface and groundwater supplies essential to our needs and our health. Water quality and water use are matters of increasing importance and concern to all citizens.

The growing competition for clean water is depleting groundwater supplies, stirring conflicts over access and priorities, and increasing costs. Because agriculture uses more than two-thirds of all groundwater, agricultural programs in research, conservation, and education are essential to improving the management of run-off from small watersheds.

A majority of states have identified agricultural nonpoint-source pollution as a major water quality problem. Concerns over on-site erosion and water quality led Congress to pass far-reaching conservation provisions contained in the Food Security Act of 1985. That act contains provisions for the Conservation Reserve, Sodbuster, Swampbuster, and Conservation Compliance, and requires farmers who participate in most USDA benefit programs to have developed an approved conservation plan by 1990 and completed installation of the planned conservation systems by 1995. This is a fast track effort when compared to the conservation history and records of this country.

This nation has set out to have clean water that is fishable and swimmable by 1995. Despite that national commitment, the Administration has recommended reductions of approximately 40 percent in federal conservation programs for the Soil Conservation Service (SCS) and Agricultural Stabilization Conservation Service (ASCS) -- even after a decline in actual buying power of 23 percent over the past decade. From 1968 to 1987, the Soil Conservation Service work force decreased by 35 percent while U.S. cropland acreage increased by 10 percent.

The Administration's FY '88 Proposed Budget would also terminate many proven programs in conservation and development. The passage of the Conservation Section of the Food Security Act was predicated on the continuance of existing conservation programs.

Based on recent analysis by the National Association of Conservation Districts, more than 6,000 additional professional conservation personnel are needed to meet the increased workload. I urge this subcommittee to examine closely the budget recommendations developed by the National Association of Conservation Districts which will be presented by others representing this organization. I believe that the strength of this nation is vested in its land, water, and people who care for these resources. I will strongly support adequate appropriations to meet our national conservation needs and objectives and believe they should be given top priority within the agricultural and rural development budget.

REVITALIZING RURAL AMERICA

Rural America is at a turning point. Rural communities have been dealt one blow after another -- staggering declines in farm income and farmland values, increased agricultural competition, the collapse of other resource-based industries, such as mining, timber, and petroleum, and finally, the loss of manufacturing jobs to domestic economic upheaval and foreign trade.

Rural America is home to 63 million Americans -- a third of our citizens -- and stewards of nearly 90 percent of our natural resources. Rural Americans are a diverse lot -- families living in some 14,000 towns and cities; farmers who depend on outside income to support their families; hundreds of thousands of people

IN MOBILE HOMES, CLUSTERED ABOUT HIGHWAY INTERSECTIONS, OR STREWN ALONG COUNTRY ROADS; INDIVIDUALS LIVING IN COMPANY TOWNS AND FISHING VILLAGES; AND THE OWNERS OF THOUSANDS OF SMALL BUSINESSES CRITICAL TO THE WELFARE OF THE NATION.

THIS COUNTRY CANNOT AND MUST NOT LEAVE RURAL AMERICA BEHIND. I URGE THE SUBCOMMITTEE TO SUPPORT PROGRAMS THAT WILL ASSIST THE RURAL COMMUNITIES AND TOWNS THAT SERVE FARM FAMILIES AND OTHER RURAL RESIDENCE. WE NEED SUCCESSFUL DEMONSTRATION PROJECTS THAT CONCENTRATE ON VALUE-ADDED BY THE LOCAL COMMUNITIES - PROJECTS THAT PROCESS THE NATURAL RESOURCES AND AGRICULTURAL PRODUCTS BY ADDING TO THEIR VALUE THROUGH LOCAL EMPLOYMENT IN SMALL INDUSTRIES. ATTACHED IS A PROPOSED PROJECT TITLED "RESOURCE INTEGRATION AND COORDINATION FOR ECONOMIC DEVELOPMENT IN RURAL AREAS OF APPALACHIA AND THE SOUTH" THAT HAS A BUDGET REQUEST OF $2.4 MILLION OVER A FIVE YEAR PERIOD. I REQUEST THAT THE SUB-COMMITTEE CONSIDER THE MERITS OF INCLUDING THIS PROJECT IN THE APPROPRIATIONS FOR FY 1988.

MR. CHAIRMAN, I APPRECIATE THE OPPORTUNITY TO TESTIFY AND URGE THIS SUBCOMMITTEE TO MAINTAIN A VIABLE INTEREST IN RESEARCH, EDUCATION, CONSERVATION, AND RURAL DEVELOPMENT NEEDS OF THIS COUNTRY.

TABLE I: FISCAL 1988 APPROPRIATIONS RECOMMENDATIONS

(In Thousands of Dollars)

		Fiscal 1988	
Cooperative State Research	*Fiscal 1987*	*President's Proposal*	*NASULGC Recommend*
Hatch Act	$148,792	$155,545	$173,792
McIntire-Stennis	12,412	12,975	25,000
1890 Colleges & Tuskegee	22,320	23,333	26,080
Animal Health (Section 1433)	5,476	–0–	6,400
Research Grants (PL 89-106)*			
Competitive Research Grants	40,651	44,500	59,000
Special Research Grants	28,037	–0–	49,941
1890 Research Facilities**	9,508	–0–	–0–
Rangeland	475	–0–	500
Critical Materials	20,368	–0–	–0–
Aquaculture Centers	3,000	–0–	–0–
Food & Nutrition Center	2,000	–0–	–0–
Federal Administration	2,630	1,917	1,917
Total Research	$295,669	$238,270	$342,630
Extension			
Smith-Lever:			
Formula	$229,713	$237,594	$241,484
Special Programs*	76,244	–0–	163,625
D.C. Extension	935	970	983
1890 Colleges & Tuskegee	16,877	18,291	18,291
1890 Facilities	–0–	–0–	10,000
Renewable Resources Extension	2,378	–0–	2,500
Federal Administration	6,025	5,732	5,898
Total Extension	$332,172	$262,587	$442,781
Higher Education			
Competitive Graduate Training Grants	2,852	–0–	10,000
1890 Strengthening Grants	1,902	1,988	2,000
Challenge Grants	–0–	–0–	10,000
Total Higher Education	$4,754	1,988	22,000
Forestry (Interior)			
Competitive Research Grants	$6,000	–0–	$8,000

*See Table 2 for details

**Fiscal 1987 is the final year of a five-year program.

New Programs — New Resources . . .

In addition to funding current base conservation programs new federal funding dollars are needed to successfully implement the new conservation provisions of the farm bill.

Currently there are approximately 4,950 SCS technical field professionals in nearly 3,000 district offices serving 2½ million farmers and ranchers across the nation. These professionals, along with conservation district staff and state agency staff, currently provide technical assistance on more than 60 million acres of land.

The manpower demands required by the new conservation provisions of the farm bill are rapidly outstripping the physical ability of technical employees available to handle the work.

A few statistics will help illustrate this point. From 1977 to 1987, SCS appropriations increased by 29% while the actual buying power of those funds decreased by 23%. From 1968 to 1987, the SCS workforce decreased by 35% while U.S. cropland acreage increased by 10%.

While state and local grants have substantially increased support for conservation programs during this period, the gains have not offset the losses at the federal level. The accompanying trendline charts highlight the dilemma district officials now face.

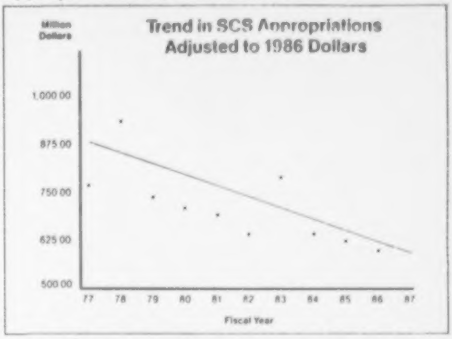
The conservation reserve program and the conservation compliance provisions of the farm bill mandate the development of soil conservation plans on nearly 118 million acres of American cropland by 1990. The sodbuster provision of the act will require conservation planning and technical assistance on another 3.4 million acres annually, and may affect up to 225 million acres of potential cropland.

These programs have created a substantial new workload for technical employees at the federal, state and local level. NACD has prepared an estimate of the planning and technical assistance needed to implement the conservation provisions of the farm bill. The following table summarizes the estimated needs.

The New Workload

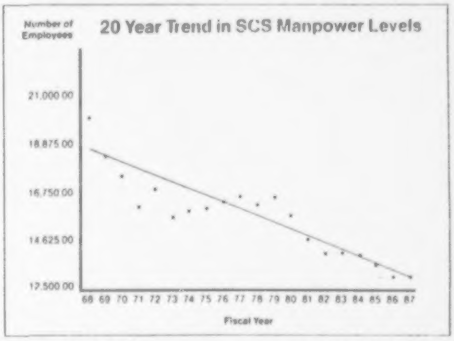
Program	Acres Affected	Additional Personnel Needed
Conservation Reserve Program	45,000,000	2,143
Conservation Compliance	73,000,000	3,476
Sodbuster	3,400,000	486
Total	**121,400,000**	**6,105**

With the partnership concept in mind, NACD is asking the federal government to fund 2,900 of the estimated 6,105 new field professionals needed to implement the new farm bill programs. Based on an average cost of $33,000 to support each of these 2,900 new positions, NACD is requesting that Congress enact an emergency supplemental appropriation of $95 million.


Trend in SCS Appropriations Adjusted to 1986 Dollars

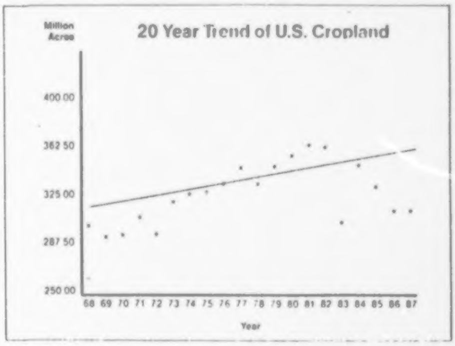
SOURCE Soil Conservation Service
U.S. Department of Agriculture Annual
Budget Reports

Prepared by the National Association of
Conservation Districts, January, 1987
The Manpower Problem


20 Year Trend in SCS Manpower Levels

SOURCE Soil Conservation Service
U.S. Department of Agriculture Annual
Budget Reports

Prepared by the National Association of
Conservation Districts, January, 1987
The Manpower Problem


20 Year Trend of U.S. Cropland

SOURCE U.S. Department of Agriculture
Agricultural Statistics 1980 & 1983 and 1986
Fact Book of U.S. Agriculture

Prepared by the National Association of
Conservation Districts, January, 1987
The Manpower Problem

The Solution . . .

At the recent NACD convention, America's conservation districts approved a funding resolution that calls on the federal government to maintain base soil conservation programs and to provide new funding to implement the conservation provisions of the farm bill. NACD is specifically recommending that SCS be funded at a level of $746 million in FY 1988 (see table below).

Included, as part of NACD's funding recommendation for SCS conservation operations, is an emergency supplemental appropriation of $95 million to help implement the farm bill conservation provisions.

State and local governments will be called upon to provide for the remaining field professionals needed to implement and maintain the new conservation provisions of the farm bill. Again, the partnership concept becomes important.

The NACD recommendation of $746 million for conservation operations allows the SCS to remain an active partner in state and local programs and meet the planning mandates of the 1985 Farm Bill.

The $9.2 million NACD recommendation for watershed planning would allow SCS to continue work on 138 plans in progress and to begin planning new projects as authorized by Congress.

NACD has recommended $191.3 million for watershed operations to continue the work on 623 projects across the country. In addition, the recommendation would allow SCS to begin new projects which may well be necessary to meet the Nonpoint Pollution Management goals of the Clean Water Act.

Currently, 2,251 contracts are awaiting funding under the Great Plains Conservation Program. The $22 million NACD recommendation would not only allow for completion of contracts under way, but would also allow for some of the contracts currently backlogged to begin.

The NACD recommendation of $27 million would allow the almost 200 RC&D councils to continue their work in encouraging rural development. In addition, 455 measures currently in progress could move closer to completion and work could begin on some of the 650 planned measures that are on hold awaiting funding.

The Bottom Line

NACD believes that the savings envisioned in the President's proposed budget do not really exist. The costs of abandoning current conservation programs are simply too high to be acceptable. The association feels there must be real growth in soil conservation programs.

NACD is leading a nationwide campaign to seek Congressional support for the needed supplemental appropriation to implement the farm bill programs. NACD officers and board members will be carrying the association's policy on funding and manpower to Capitol Hill during their spring board meeting scheduled to begin in Washington April 6th.

Federal Conservation Programs

(Compares, in millions, funding for SCS and ACS programs as enacted in the FY 1987 appropriation and as proposed in the administration's FY 1988 budget and in NACD's funding resolution recommendations.)

SCS Programs	**FY 1987 Appropriation**	**Administration's FY '88 Proposed Budget**	**NACD's FY 1988 Recommendation**
Conservation Operations	367.0	399.6	476.6
River Basin Surveys	11.8	8.3(t)	15.2
Watershed Planning	8.5	5.5(t)	9.2
Watershed Operations	161.1	49.0(t)	191.3
Emergency Flood Repair	14.8	1.0(t)	5.0
Great Plains Cons. Prog.	20.5	2.8(t)	22.0
RC&D	25.0	10.0(t)	27.0
Total SCS	**608.7**	**476.3**	**746.3**
ASCS Cost Share Programs			
Agricultural Cons. Prog. (ACP)	179.6	0(t)	194.6
Forest Incentives Prog (FIP)	11.9	0(t)	12.8
Water Bank	8.4	0(t)	9.0
Colo. River Salinity Prog.	3.8	0(t)	4.0
Total ASCS	**203.7**	**0(t)**	**220.4**

(t) = Program scheduled for FY '88 termination, includes termination expenses only.

Background Information

March, 1987

The United States Congress created the Cooperative Extension System in 1914 by the enactment of the Smith-Lever Law. This uniquely American institution has been admired and copied by nations around the world and the agricultural community is envied by other industry groups for its technology transfer and educational vehicle.

Perhaps the purpose of the Extension Service was stated most succinctly by Congressman Lever in 1913 in support of his proposed legislation. He said that Extension was "to assume leadership in every movement, whatever it may be, the aim of which is better farming, better living, more happiness, more education, and better citizenship."

The needs in Rural America have never been greater--the need to restore competitiveness and profitability to farming, the need to revitalize Rural America, the need to strengthen families, the need to develop our youth through such programs as 4-H, are among the issues of this nation that the Cooperative Extension System is uniquely qualified to address. Unfortunately, the administration has again proposed a budget reduction for Extension. This is unacceptable.

The Expanded Food and Nutrition Program (EFNEP) is a special program authorized and funded by the Congress. EFNEP is making a positive impact on the food consumption habits of low-income families. Research has shown repeatedly that low-income people have the poorest diets.

EFNEP has effectively used paraprofessionals to teach their neighbors individually and in small groups based on specific needs of the families. Nutrition knowledge and food management skills are essential for low-income people to provide adequate meals for good health and well being. In addition to improving diets, nutrition education has motivated families to raise their aspiration and become contributing members to society. Adults and youth are serving as volunteer leaders teaching others what they learned in EFNEP. Some families and program assistants have completed their high school and college education and are self-supporting. EFNEP has the expertise to help low-income families identify their needs, make wise decisions and improve their quality of life.

A 100 percent reduction in funds would eliminate the Expanded Food and Nutrition Program in Tennessee. This would impact directly upon 6000 homemakers, 17,000 youth, and affect the diets of more than 34,000 family members. These citizens are among the most disadvantaged in the state.

The Urban Gardening Program is another program that has been funded by the United States Congress. One of the program sites is Memphis, Tennessee. The estimated value of production last year of the participants in Memphis was approximately 12 times the cost of the program. The 3,200 Memphis families participating in the program improved their food supply significantly and their achievements in gardening are a source of pride to them.

Elimination of federal funding for integrated pest management programs is short-sighted. These programs are reducing costs to farmers and reducing the amount of pesticides introduced into the environment. In Tennessee last year, direct savings to farmers from reduced pesticide applications were about 15 times the cost of the educational programs. In addition, the environment was protected through the judicious use of pesticides. With the concerns of helping farmers to become more competitive and the quality of ground water, those programs that contribute toward solutions of these concerns need the support of the United States Congress.

The Administration has again proposed elimination of funding for the Renewable Resources Extension Act (RREA). Private landowners control a majority of the nation's forest resources and benefit through increased productivity from the Extension System's educational programs. Although Tennessee is the nation's leading hardwood lumber producer, the forest produces less than 50 percent of its potential. Many farmers do not recognize the multi-value of their woodlands and lack skill in merchandising the forest products.

The RREA Program has provided both the incentive and resources to redirect and significantly expand and enhance the effectiveness of the development of county programs for integration of wildlife and forestry management to enhance profitability, recreational opportunities, and soil and water conservation on family farms. Elimination of RREA Program funds would severely impact Extension's natural resources educational programs. Through the RREA funds, Extension natural resources educational programs have been intensified. Loss of these funds would require reverting to extensive programs which are less effective.

The Congress has appropriated about $1.500,000 annually for the past three years to address the needs of financially distressed farmers in selected pilot states. Computer assisted farm enterprise analysis, statewide hotlines, counseling centers, cooperative efforts with lenders and other public agencies are among the many efforts being supported from these funds.

The Agricultural Extension Service at The University of Tennessee has one of the pilot programs. Because of the favorable results from the pilot program, the Tennessee Legislature appropriated funds to establish a program in the Agricultural Extension Service to help farm families cope with financial and emotional stress. This program, named MANAGE, focuses on how to manage the farm business, manage farm credit, manage farm family finances, and manage stress. More farmers are being helped in Tennessee because of the added state funds, but the requests for assistance from farmers far exceed the staff resources available.

The Congress should not only restore funds to address the needs of financially distressed farmers but should expand this from a pilot program to a national initiative of restoring profitability to farming and competitiveness to agriculture.

The Congress should continue its support of the core programs of the Cooperative Extension System--Agriculture and Natural Resources, Rural Community Development, 4-H Youth Development and Home Economics. While remedial programs may be helpful in dealing with the problems of families and youth, they are not nearly as effective as those positive programs such as the 4-H and Home Economics programs of the Cooperative Extension System.

The citizens of Tennessee take special pride in the more than 170,000 young people enrolled in the 4-H program and the accomplishments of these fine young people.

Extension, as Congressman Lever stated nearly 75 years ago, is "to assume leadership in every movement whatever it may be, the aim of which is better farming, better living, more happiness, more education, and better citizenship." The Congress must insist that the Cooperative Extension System be funded adequately, to carry out its mission.

Proposal

RESOURCE INTEGRATION AND COORDINATION FOR ECONOMIC DEVELOPMENT IN RURAL AREAS OF APPALACHIA AND THE SOUTH

Though not as highly publicized as the farm and rural crisis of the Midwest, the economic situation in much of rural Appalachia and the South is just as critical. However, the situation differs in many respects, the most important of which are the smaller landholdings, diversity of the natural resource base, higher incidence of unemployment and underemployment and cultural orientation. Agriculture and rural communities in this region will not be substantially stabilized or strengthened by traditional commodity program approaches. Research and extension programs within the land-grant system directed toward improving competitiveness in currently produced commodities (through biotechnology advances, for example) must continue. However, a new strategy is needed to revitalize these areas. This strategy must be designed to accomplish the following objectives: 1) to insure that increased competitiveness can be acquired by small family and part-time farmers; 2) to introduce new enterprise alternatives in which the region can establish some comparative advantage; and 3) to develop processing industries or increase the "value-added" in commodities produced in the region in other ways. Particular attention should be given to commodities which can be exported or substituted for imports.

This strategy must involve integration and coordination of resources in several ways if it is to be successful. First and most basic is the need to view the region's natural and human resource bases in an integrated fashion in consideration of new opportunities. The region must capitalize on the distinct characteristics of these resource bases by identifying opportunities in which they complement one another. Second, coordination of resources, particular information, among individual entrepreneurs, the private marketing sector and the public sector is also needed. Some assurance must be gained that demand and marketing channels exist for new and/or further processed commodities before production is initiated. Third, resource integration and coordination is a key at the farm level. Farm operations in the region have traditionally been fairly diversified and off-farm employment has been important. The diversity of the natural resource base, as well as the availability of land and labor resources as a result of the Conservation Reserve Program, suggests further movement toward multiple enterprises and outputs, for example, traditional agricultural crops or livestock along with timber production or provision of fee recreational services. Management skills will be an important factor here.

The situation in the State of Tennessee is representative of the problems and prospects in this region. To allow the research and extension programs within the Institute of Agriculture at the University of Tennessee to provide the regional leadership needed to facilitate this resource integration and coordination and to achieve these objectives, the following funds are requested over the next five years.

BUDGET REQUEST ($)

Objectives	FY88	FY89	FY90	FY91	FY92	Total
1. Increasing competitiveness of small family and part-farmers	Identify and evaluate potential cost-reducing technologies		Adapt technologies for small family and part-time farmers		Integrate into ongoing extension programs	
	$ 80,000	$ 85,000	$ 90,000	$ 95,000	$100,000	$ 450,000
2. Introduction of new enterprise alternatives	Identification of potential alternatives	Analysis of market constraints and opportunities	Analysis of production opportunities	Market development	Demonstration with selected operators	
	$100,000	$110,000	$120,000	$130,000	$140,000	$ 600,000
3. Increasing value-added in current or new commodities	Identification of potential processing activities	Analysis of market constraints and opportunities	Analysis of processing opportunities	Market development	Demonstration with prototype plants	
	$100,000	$110,000	$120,000	$130,000	$140,000	$ 600,000
4. Designing public policies to facilitate the rural revitalization	Identification of current policies and their impact		Design of new policies		Ongoing monitoring of policy impacts	
	$ 50,000	$ 55,000	$ 60,000	$ 65,000	$ 70,000	$ 300,000
[Administrative support]	$ 80,000	$ 85,000	$ 90,000	$ 95,000	$100,000	$ 450,000
	$410,000	$445,000	$480,000	$515,000	$550,000	$2,400,000

STATEMENT OF JOE K. THOMAS III

MR. CHAIRMAN, I AM JOE K. THOMAS, III OF BRISTOL, TN., PRESIDENT OF THE TENNESSEE ASSOCIATION OF CONSERVATION DISTRICTS, AN ASSOCIATION THAT REPRESENTS 95 COUNTY SOIL CONSERVATION DISTRICTS AND 475 VOLUNTEER DISTRICT SUPERVISORS. IN ADDITION, I AM A FULL TIME FARMER AND A PRACTITIONER OF SOIL AND WATER CONSERVATION. I APPRECIATE THE OPPORTUNITY TO APPEAR BEFOR THIS SUBCOMMITTEE ON APPROPRIATIONS FOR SOIL AND WATER CONSERVATION AND OTHER AGRICULTURE AND RURAL DEVELOPMENT PROGRAMS.

FIRST, MAY I EXPRESS MY APPRECIATION TO EACH OF YOU AND YOUR COLLEAGUES WHO SUPPORTED THE PASSAGE OF THE 1985 FOOD SECURITY ACT BY STATING THAT I AGREE WITH OUR OWN CONGRESSMAN ED JONES WHEN HE EXCLAIMED "THE 1985 FOOD SECURITY ACT IS THE MOST SIGNIFICANT FARM LEGISLATION, ESPECIALLY THE CONSERVATION PROVISIONS, THAT HAS BEEN ENACTED BY CONGRESS IN THE PAST 50 YEARS.

THE CONSERVATION COMPLIANCE REQUIREMENTS OF THIS ACT WILL ACCOMPLISH A GREAT DEAL TOWARD PROTECTING OUR VALUABLE SOIL AND WATER RESOURCES BY TAKING MARGINAL (HIGHLY ERODIBLE) LANDS OUT OF PRODUCTION. UNFORTUNATELY, THIS LAW IS A TWO EDGED SWORD. WHILE THE LAW MANDATES CERTAIN REQUIREMENTS OF LANDOWNERS TO ASSURE PROPER CONSERVATION, IT ALSO PLACES A GREAT BURDEN ON CONSERVATIONISTS AND LOCAL SOIL CONSERVATION DISTRICTS TO FULFILL THE INFORMATION AND TECHNICAL ASSISTANCE WORKLOADS NECESSARY TO CARRY OUT THE ACT AND TO ASSURE COMPLIANCE. I WISH TO DISCUSS BRIEFLY THE STATUS OF CONSERVATION PROGRAMS IN TENNESSEE IN LIGHT OF THIS NEWLY MANDATED WORKLOAD.

WE ARE CONCERNED THAT WE WILL BE UNABLE TO CONTINUE THE BASIC TECHNICAL ASSISTANCE SERVICES TO LANDOWNERS MANDATED BY PREVIOUS LAWS AND ACCEPTED BY CONSERVATION DISTRICTS THROUGH joint Memonrandum of Understandings with USDA and the Soil Conservation Service due to the conservation requirements of the 1985 Food Security Act. The Soil Conservation Service manpower in our state has declined steadily over the last few years - in FY83 SCS provided 319 staff years of professional assistance, while only 258 staff years of assistance is projected for FY87. This steady decline in manpower and funding would be worsened significantly by the President's proposed budget which would further reduce SCS assistance in Tennnessee by an estimated 90 personnel. This proposed cut would eliminate Resource Conservation and Development Programs (RC&D), Water Resource Planning and Operations, Resource Inventory and Monitoring, and all other existing programs with the exception of Conservation Technical Assistance and the Comprehensive Soil Survey Programs. Even these last two would be drastically changed to accommodate the work required by the Food Security Act.

These reductions and proposed shifts in program emphasis will necessitate a decreased presence of assistance in numerous Districts in Tennessee. Conservation work and program assistance is as much an informational and educational process as it is a target for conservation planning, application of conservation systems and approving cost sharing assistance that has as its objective only erosion control. The multiplier effects of conservation technical assistance reaches far beyond those who are directly assisted. We fear that a decrease in the presence of technical assistance personnel in the smaller districts will be regressive in its effect on soil and water conservation programs and individuals' conservation ethics.

The administration has indicated that manpower for technical assistance will be shifted to the areas with the larger Food Security Act compliance workloads. We agree on the importance of the Act's requirements and objectives, however we

QUESTION THE WISDOM OF SACRIFICING EXISTING TECHNICAL ASSISTANCE AND ON GOING CONSERVATION PROGRAMS TO MEET JUST THOSE REQUIREMENTS. ABOVE ALL, WE MUST NOT MIX THE WISDOM OF CONSERVATION COMPLIANCE, WITH THE SHORT SIGHTEDNESS OF STOP-GAP FUNDING AND A BELIEF THAT "ONCE THE LAND IS FIXED, IT WILL STAY FIXED".

THE LEADERSHIP PROVIDED BY DISTRICT SUPERVISORS FOR THE ON-GOING CONSERVATION PROGRAMS OF OUR LOCAL CONSERVATION DISTRICTS ARE THE PROMOTERS OF CONSERVATION ETHICS IN THIS COUNTRY. DURING THE PAST YEAR IN TENNESSEE, 2,851 NEW COOPERATORS WERE ADDED TO DISTRICT RECORDS. THESE ARE LANDOWNERS WHO FOR THE FIRST TIME HAVE SIGNED AGREEMENTS TO PRACTICE SOUND SOIL AND WATER CONSERVATION IN ACCORDANCE WITH TECHNICAL GUIDES OF THE LOCAL SOIL CONSERVATION DISTRICT. THESE NEW CONSERVATION CONVERTS PLACED 523,176 ACRES OF LAND UNDER A CONSERVATION AGREEMENT WITH DISTRICTS AND IN TURN THE DISTRICTS PROMISED CONSERVATION TECHNICAL ASSISTANCE. THESE NEW COOPERATORS WERE LOCATED THROUGHOUT ALL OF OUR 95 DISTRICTS WITHOUT REGARD TO EXISTING EROSION PROBLEMS. AT THE SAME TIME MORE THAN 657,000 ACRES HAD CONSERVATION PLANS DEVELOPED COOPERATIVELY BETWEEN APPROXIMATELY 15,000 LANDOWNERS AND THE DISTRICTS. MANY OF THESE PLANS ADDRESS CONSERVATION OF WATER, FOREST, AND WILDLIFE RESOURCES AND THE MAINTAINANCE OF EXISTING GRASSES, ROTATIONAL SYSTEMS, AND OTHER CONSERVATION PRACTICES THAT ARE NOT TOTALLY RELATED TO HIGHLY ERODIBLE LAND.

TO DATE IN TENNESSEE, WE HAVE 5,485 FARMS ENROLLED IN THE CONSERVATION RESERVE PROGRAM WHICH ACCOUNTS FOR 261,400 ACRES OF HIGHLY ERODIBLE LANDS REQUIRING CONSERVATION PLANS AND APPLICATION ASSISTANCE. IN ADDITION MORE THAN 5,000 FARMS ARE EXPECTED TO NEED CONSERVATION PLANS THIS SPRING AS A RESULT ON THE IMPACTS OF THE "SODBUSTERS" AND "SWAMPBUSTERS" PROVISIONS OF THE FOOD SECURITY ACT. ADDED TO THIS WORKLOAD IS THE IMPACT OF

THE "CONSERVATION COMPLIANCE" THAT REQUIRES AN APPROVED CONSERVATION PLAN BY 1990. THIS PLANNING REQUIREMENT APPLIES TO ALL HIGHLY ERODIBLE LAND THAT WILL BE FARMED IN A ROW CROP COMMODITY. INSTALLATION OF THESE PLANNED SYSTEMS, WHICH REQUIRES TECHNICAL ASSISTANCE NOT ONLY TO INSTALL BUT TO OPERATE AND MAINTAIN, IS REQUIRED BY 1995. IT BECOMES EVIDENT THAT THERE IS A NEED FOR ADDITIONAL CONSERVATION ASSISTANCE BY TRAINED PROFESSIONALS. THESE PROGRAM REQUIREMENTS REPRESENT A SIZABLE INCREASE IN WORKLOAD FOR THE TECHNICAL ASSISTANCE PERSONNEL OF THE SOIL CONSERVATION SERVICE.

CONSERVATION TILLAGE SYSTEMS, PRIMARILY NO-TILL AND MINIUM-TILL, CONTINUES TO INCREASE IN TENNESSEE. THESE SYSTEMS ARE APPLICABLE TO PRIME FARM LANDS AND THE LESS ERODIBLE LANDS IN ADDITION TO THE HIGHLY ERODIBLE LANDS. THEY HAVE PROVEN TO BE BOTH ECONOMICALLY SOUND AND HAVE A FAVORABLE ENVIRONMENTAL IMPACT. THESE SYSTEMS GREW FROM 50,000 ACRES IN 1978 TO OVER 1,400,000 ACRES APPLIED IN 1986. CONSERVATION TILLAGE INCREASED BY SIX PERCENT IN CORN AND BY NINE PERCENT IN SOYBEAN PRODUCTION SYSTEMS LAST YEAR IN THE STATE. THESE SYSTEMS REQUIRE EXCELLENT MANAGEMENT SKILLS WHICH MUST BE UPDATED CONSTANTLY TO KEEP UP WITH THE NEW TECHNOLOGIES AND ENVIRONMENTAL CONCERNS. THESE MANAGEMENT SKILLS CAN ONLY BE PRODUCED AND SUSTAINED THROUGH FIELD TECHNICAL ASSISTANCE. WE MUST MAINTAIN A BALANCE IN THE PROVISION OF TECHNICAL ASSISTANCE TO THOSE ACRES REMAINING IN PRODUCTION, AND THOSE BEING REMOVED FROM PRODUCTION AS A RESULT OF THE FOOD SECURITY ACT OF 1985.

DURING THE PAST YEAR IN TENNESSEE, TECHNICAL ASSISTANCE WAS PROVIDED TO MORE THAN 33,400 INDIVIDUAL LAND OWNERS OR CITIZENS AND 200 UNITS OF GOVERNMENT WHO HAD A NEED FOR TECHNICAL ASSISTANCE IN THE CONSERVATION OF OUR STATES' SOIL AND WATER RESOURCES. THE FOOD SECURITY ACT ADDRESSES AN IMPORTANT ISSUE OF

EROSION ON CROPLANDS OR POTENTIAL CROPLANDS, HOWEVER THERE ARE MANY OTHER CONSERVATION ISSUES THAT REQUIRE TECHNICAL ASSISTANCE THAT OTHER FEDERAL LEGISLATION ADDRESS. THESE LAWS HAVE NOT BEEN CANCELLED OR MODIFIED AND SOIL CONSERVATION DISTRICTS HAVE A COMMITMENT TO MEET THESE PROGRAM REQUIREMENTS. IN ADDITION SOIL CONSERVATION DISTRICTS PROVIDE OTHER CONSERVATION ASSISTANCE BASED ON STATE LEGISLATION AND LOCAL GOVERNMENT REQUESTS. EXAMPLES ARE SOIL SURVEY INTERPRETATIONS, LAND EVALUATIONS AND SITE ASSISTANCE DATA, FORESTRY AND WILDLIFE INFORMATION THAT RELATES TO SOIL DATA AND FARM OPERATIONS, CONSERVATION ETHICS FOR BOTH RURAL AND URBAN CITIZENS, DEVELOPMENT OF CONSERVATION YOUTH GROUPS, ASSISTANCE TO ORPHAN COAL MINE RECLAMATION, DEVELOPMENT OF SOIL SURVEYS, ETC.

THERE ARE NUMEROUS OTHER EXAMPLES OF TECHNICAL ASSISTANCE THAT WILL BE SACRIFICED IF ALL SOIL CONSERVATION EFFORTS ARE DIRECTED AT THE FOOD SECURITY ACT OF 1985. THE DISTRICTS IN TENNESSEE DO NOT MIND ACCEPTING THE RESPONSIBLITIES OUTLINED FOR US IN THE ACT. CONSERVATION OF SOIL AND WATER IS OUR REASON FOR EXISTENCE. HOWEVER, WE ASK THAT YOU CONSIDER THE LOSSES WE WILL SUSTAIN IN IMPLEMENTING THE FOOD SECURITY ACT, IF THAT IMPLEMENTATION OCCURS AT THE EXPENSE OF OTHER PROGRAMS.

THE FY87 APPROPRIATION FOR THE SOIL CONSERVATION SERVICE WAS $608.7 MILLION AND THE ADMINISTRATION'S PROPOSED BUDGET FOR FY88 IS ONLY $476.3 MILLION. THIS PROPOSED CUT COMES DURING THE PERIOD OF INCREASING WORKLOAD. THE NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS HAS RECOMMENDED A $95 MILLION INCREASE OVER THE FY87 BUDGET IN VIEW OF THE INCREASED REQUIREMENTS OF THE FOOD SECURITY ACT. SURELY THERE IS A MIDDLE GROUND IN THIS IMPORTANT ISSUE.

THE CONSERVATION PARTNERSHIP BETWEEN THE FEDERAL GOVERNMENT AND LOCAL PEOPLE THROUGH SOIL CONSERVATION DISTRICTS HAS SERVED

THE RESOURCES OF THIS COUNTRY FOR OVER FIFTY YEARS. OUR CONSERVATION PROGRAMS HAVE SERVED AS A MODEL FOR THE DEVELOPING COUNTRIES AS WELL AS OTHER DEVELOPED COUNTRIES. DISTRICT PEOPLE ARE PEOPLE WHO HAVE BEEN INVOLVED IN AGRICULTURE ALL OUR LIVES. ONE CANNOT BE INVOLVED IN AGRICULTURE WITHOUT BEING OR BECOMING A PRAGMATIST. WE REALIZE THE NEED FOR FINANICAL AND BUDGETARY RESPONSIBILITY. HOWEVER, WE MUST NOT DISMANTLE FIFTY YEARS OF SUCCESS TO PROVIDE A "QUICK FIX". THE FOOD SECURITY ACT ADDRESSES AN IMPORTANT SEGMENT OF OUR NATION'S CONSERVATION PROBLEMS. HOWEVER, WE MUST NOT FOCUS ALL OUR RESOURCES AND EFFORTS ON ONE SEGMENT OF A PROBLEM TO THE DETRIMENT OF THE WHOLE CONSERVATION NEEDS OF THIS COUNTRY.

NATIONALLY, IN FY88 AND FY89, THE FOOD SECURITY ACT REQUIREMENTS ON WORKLOADS IS PROJECTED TO COMPLETELY CONSUME THE MANPOWER NECESSARY FOR THE "ON-GOING PROGRAMS" OF THE SOIL CONSERVATION DISTRICTS. IT IS PROJECTED THAT THE SOIL CONSERVATION SERVICE WILL STILL HAVE A 6,000 TO 7,000 STAFF YEAR DEFICIT.

AN ANALYSIS OF THE IMPACT OF THE FOOD SECURITY ACT ON ACTIVITIES OF THE SOIL CONSERVATION SERVICE IN TENNESSEE REVEALS THE FOLLOWING STAFF YEARS NEEDED BETWEEN 1987 AND 1995:

1. THE CONSERVATION RESERVE PROVISION WILL REQUIRE A TOTAL OF 221 STAFF YEARS. THIS WILL INCLUDE DETERMINING ELIGIBLE LANDS, SOIL SURVEYS, PREPARING CONSERVATION PLANS AND CONTRACTS, AND ASSISTANCE IN IMPLEMENTING THE NEEDED CONSERVATION SYSTEMS.

2. THE "SODBUSTER" AND "CONSERVATION COMPLIANCE" PROVISIONS WILL REQUIRE 251 STAFF YEARS OF TECHNICAL ASSISTANCE.

3. THE "SWAMPBUSTER" PROVISION WILL REQUIRE 115 STAFF YEARS. THIS INCLUDES SPECIAL HYDRIC SOIL IDENTIFICATION, MAPS, AND DETERMINATION OF WETLAND ON A FARM BY FARM BASIS.

THE TOTAL IMPACT OF THE FOOD SECURITY ACT OF 1985 WILL REQUIRE A TOTAL OF 587 ADDITIONAL STAFF YEARS OF SCS TECHNICAL ASSISTANCE OVER THE NEXT NINE YEAR PERIOD OF 1987-1995. THE ULTIMATE SIGNIFICANCE OF THESE STATISTICS IS THE FACT THAT THE CURRENT WORK FORCE OF 259 SCS EMPLOYEES AND 94 STATE AND LOCAL EMPLOYEES FOR FIELD OPERATIONS WILL NOT BE ABLE TO MEET THE CONSERVATION NEEDS OF TENNESSEE, ITS 95 SOIL CONSERVATION DISTRICTS, 96,000 FARMERS, 1,250,000 RURAL RESIDENTS AND THREE MLLION URBAN CITIZENS. THE BASIC CONSERVATION ASSISTANCE AND FIELD OPERATIONS WILL BE TOTALLY CONSUMED BY THE FOOD SECURITY ACT WORKLOAD AND WILL HAVE A DEFICIT OF 120 TO 150 STAFF YEARS IF THE PRESIDENT'S PROPOSED BUDGET IS ACCEPTED.

WE ALSO ASK YOU TO CONSIDER AN EMERGENCY SUPPLEMENTAL APPROPRIATION FOR FY87 THAT WILL ALLOW US TO ASSUME OUR NEW RESPONSIBILITIES AND TO MAINTAIN THE BASIC CONSERVATION PROGRAMS THAT OUR DISTRICTS ARE COMMITTED TO MAKING AVAILABLE TO OUR STATE'S CITIZENS. THANK YOU AGAIN FOR THIS OPPORTUNITY TO SHARE OUR CONCERNS.

TEXAS TECH UNIVERSITY

STATEMENT OF SAM E. CURL, DEAN, COLLEGE OF AGRICULTURAL SCIENCES

ACCOMPANIED BY ROBERT ALLEN, ASSOCIATE DEAN, FOREST SERVICE

Senator BURDICK. Our next witness is Sam E. Curl, dean of the College of Agricultural Sciences, Texas Tech University.

Mr. CURL. Thank you, Mr. Chairman.

I am Sam Curl, dean of the College of Agricultural Sciences at Texas Tech University. With me today is Dr. Robert Allen, associate dean for research.

We are most appreciative for the opportunity to appear here before the committee today on behalf of urgently needed research in the area of plant stress research and water conservation, a cooperative effort that has been undertaken jointly by the USDA, ARS, Texas Tech University, and the Texas Agricultural Experiment Station to address these critical problems.

The background setting for the problem which the research program addresses is found in Senate Document 59, the feasibility study conducted by the Science and Education Administration of USDA in 1977, and the statement of Texas Tech University submitted for the record before this committee in 1979.

The Great Plains is one of the most intensely developed and highly productive agricultural regions of the United States. However, water availability and quality continues to be limiting factors affecting the growth and cultivation of existing crop species. This underscores the urgent need for new varieties of drought resistant food and fiber crops for areas where nonrechargeable ground water reserves are declining, energy costs are increasing, and natural precipitation, even though limited, could be used more efficiently.

The national thrust to seek out all viable strategies for conserving energy and water in agriculture has amplified the urgency to seek more energy and water efficient strains of plant materials and improved soil and water management practices. The need for a comprehensive, multidisciplinary, long-term basic science research program is obvious. Texas Tech University has taken the lead to work to develop a cooperative research program with the U.S. Department of Agriculture, the Texas Agricultural Experiment Station, agricultural colleges and universities throughout the region, agricultural producers, the agribusiness industry, and private research organizations.

In 1978, Congress appropriated $100,000 for a feasibility study. The study team concluded that there was indeed an urgent need for a plant stress and water conservation research program and that Lubbock, TX, was the ideal location for a laboratory facility. A later decision to locate the facility on the same campus of Texas Tech University, in conjunction with the College of Agricultural Sciences, finalized the first major step in the development of the program.

In 1979, Congress appropriated $800,000 for the preparation of a research program plan and architectural and engineering plans for the appropriate laboratory in which to carry out the proposed research. These plans have now been completed for phase I. The structure will contain about 67,000 square feet of research space and will cost approximately $24 million for construction. The facility contains space for 22 scientists, with accompanying greenhouses, headhouses, growth chambers, and storage units.

In 1983, Congress appropriated $500,000 for preparation of the architectural and engineering plans for phase II of the laboratory, for review and finalization of all plans, and for development of final construction estimates. These plans are near completion.

Through fiscal year 1987, Congress appropriated a total of $5.4 million for cooperative research in plant stress and water conservation. Scientists from USDA–ARS, Texas Tech University, and the Texas Agricultural Experiment Station have initiated studies within the framework of the research program plan developed to guide the orderly, systematic and effective search for the information needed to solve the problems identified in this statement.

The scientists are making progress in better understanding the relative importance of various developmental and physiological responses of plants to soil water deficits and to atmospheric drought. A substantial amount of research has been initiated in the genetic improvement of grain sorghum and cotton. These crops can be grown in areas of limited rainfall.

The research program and proposed laboratory require a number of disciplinary teams in areas such as soil physics, soil chemistry, soil classification, plant physiology, plant breeding, agricultural engineering, and other allied areas requiring individual scientist input. This level of activity allows effective and efficient research activity to focus on critical questions relating to problems of plant stress and water conservation.

Because of the complexity of the proposed research, and the resources needed to solve these pressing problems, this program will be of a long-term nature. The program is being recognized as a national center of excellence for basic plant stress and water conservation research in agriculture.

With the development of the program, the university is in a position to invite private industry scientists and research support to join the activity. Technical relationships have been established with the USDA–ARS Plant Gene Expression Center in California, the Southwest Consortium on Plant Genetics and Water Resources headquartered at New Mexico State University and Los Alamos National Research Laboratory, and the Noble Foundation in Oklahoma.

Congress in fiscal year 1977 appropriated $100,000 to initiate a feasibility study to determine the most appropriate size, program, and location for the Plant Stress and Water Conservation Laboratory initially identified in Senate Document 59. That feasibility study was delivered to the Congress in March 1978. In fiscal year 1979, Congress appropriated $800,000 to initiate planning for the research program and proposed facility in cooperation with Texas Tech University at Lubbock.

In fiscal year 1983, Congress appropriated $500,000 to complete planning for phase II and to finalize all plans and cost estimates needed for construction of the proposed laboratory. These plans are near completion. Near final architectural plans and specifications for the proposed laboratory have been delivered to USDA–ARS.

In fiscal years 1980, 1981, 1982, 1983, 1984, 1985, 1986, and 1987, Congress appropriated $200,000, $400,000, $750,000, $750,000, $900,000, $1,150,000, and $1,150,000, respectively, for cooperative research in plant stress and water conservation.

It is proposed that Congress continue to recognize the urgency of the research program by appropriating funds at the level of $550,000 over the current budget allocation of $1,150,000 for this project to continue and strengthen the cooperative plant stress and water conservation research program. This will bring the total research funding for fiscal year 1988 to $1,170,000.

It is further requested that the Congress appropriate $24 million for the construction of the Plant Stress and Water Conservation Laboratory in fiscal year 1988 on the land provided by Texas Tech University.

Mr. Chairman, and members of the committee, we appreciate your continuing interest in this important and timely research program, and we thank you very much for your consideration of this proposal.

Senator BURDICK. Thank you for a very fine statement.

I only have one question. What kind of a football team does Texas Tech University have?

Mr. CURL. We hope to have one this fall.

[The statement follows:]

STATEMENT OF DR. SAM E. CURL

SUMMARY

USDA-ARS Plant Stress and Water Conservation Cooperative Research Program Funding and Proposed Construction of a Plant Stress and Water Conservation Laboratory in Cooperation with Texas Tech University and the Texas Agricultural Experiment Station.

SUMMARY OF ACTIONS TO DATE

In fiscal year 1977, Congress appropriated $100,000 to initiate a feasibility study to determine the most appropriate size, program and location for the Plant Stress and Water Conservation Laboratory initially identified in Senate Document 59. That feasibility study was delivered to the Congress in March, 1978. In fiscal year 1979, Congress appropriated $800,000 to initiate planning for the research program and proposed facility in cooperation with Texas Tech University at Lubbock. In fiscal year 1983, Congress appropriated $500,000 to complete planning for Phase II and to finalize all plans and cost estimates needed for construction of the proposed laboratory. The research program plan, the facility program amendments and the architectural plans and specifications for construction of the laboratory have been completed. A cooperative USDA-ARS research unit is in place in Lubbock occupying temporary space on the campus of Texas Tech University and at the USDA-ARS site north of Lubbock. In fiscal year 1980, Congress appropriated $200,000 to initiate basic research. The Congress appropriated $400,000 for the research program for fiscal year 1981, $450,000 in fiscal year 1982, $750,000 in fiscal year 1983, $750,000 in fiscal year 1984, $900,000 in fiscal year 1985, $1,150,000 in fiscal year 1986, and $1,150,000 in fiscal year 1987.

SPECIFIC ACTION REQUESTED OF THE COMMITTEE

It is proposed that Congress continue to recognize the urgency of the research indicated by appropriating funds at the level of $550,000 over the current budget allocation of $1,150,000 ($525,000 Base Funds plus $625,000 Formal Budget Funds) to this project to continue and strengthen the plant stress and water conservation research program. These funds are to be directed for cooperative research in plant stress and water conservation at Lubbock, Texas involving USDA-ARS, Texas Tech University and the Texas Agricultural Experiment Station. The funds will be used to increase the research effort and to provide support for a core of scientists which form the base for a more comprehensive plant stress and water conservation laboratory which has been planned at Lubbock, Texas.

We further request the Congress to appropriate funding in the amount of $24,000,000 for construction of the Plant Stress and Water Conservation Laboratory. These funds could be appropriated in phases. This laboratory would be constructed on a tract of land on the campus of Texas Tech University. The Board of Regents of Texas Tech University has authorized the lease of this land to the federal government for the purpose indicated. While recognizing the urgency for reduced federal spending, we believe the investment in this facility is one in which very visible and tangible benefits will be realized within a decade. The full thrust of the research program cannot be realized until the highly specialized facilities included in the laboratory are in place and ready for use by the scientists.

The proposed laboratory represents the central structure that will facilitate the molding together in a cohesive unit the now mature, individual research programs while serving as the focal point for linkages to the expertise in other programs at different locations, such as those in New Mexico and Oklahoma. The Plant Stress and Water Conservation Research Program at Lubbock is being recognized as a national Center for Excellence, and the program continues to grow. Technical working relationships have been established with the USDA-ARS Plant Gene Expression Center in California, the Southwest Consortium on Plant Genetics and Water Resources headquartered at New Mexico State University and the Los Alamos National Research Laboratory, and the Noble Foundation at Ardmore, Oklahoma.

INTRODUCTION

Mr. Chairman, I greatly appreciate the opportunity to appear before the Committee today on behalf of continued support of agricultural research in the area of plant stress and water conservation. This vital research is encompassed in the comprehensive nationwide research mission of the U. S. Department of Agriculture-Agricultural Research Service (USDA-ARS). This intensified research program implements the recommendations of the Plant Stress and Soil Water Conservation feasibility study prepared by the USDA-ARS.

The background setting for the problem which the research program addresses is found in Senate Document 59, the feasibility study conducted by the Science and Education Administration of USDA in 1977, and the statement of Texas Tech University submitted for the record before this committee on March 26, 1979. We will not repeat this information, as we believe the record is replete with scientific and economic documentation which describes the conditions of the region and the research required to seek viable solutions to a complex set of critical problems confronting agriculture and natural resource conservation throughout the Great Plains, the semi-arid southwest and arid and semi-arid lands throughout the world. Water availability and quality continue to be limiting factors affecting the growth and cultivation of existing crop species. This underscores the urgent need for new varieties of drought resistant food and fiber crops for areas where non-rechargeable groundwater reserves are declining, energy costs are increasing, and natural precipitation--even though limited--could be used more efficiently.

The national thrust to seek out all viable strategies for conserving energy and water in agriculture has amplified the urgency to seek more energy- and water-efficient strains of plant materials and improved soil and water management practices. The need for a comprehensive, multidisciplinary, long-term basic science research program is obvious. Texas Tech University has taken the lead to work to develop a cooperative research program with the U. S. Department of Agriculture-Agricultural Research Service, the Texas Agricultural Experiment Station, agricultural colleges and universities throughout the region, agricultural producers, the agribusiness industry and private research organizations.

BACKGROUND

The key planning events involving Texas Tech University which have taken place in conjunction with the development of the research program and laboratory to date are as follows:

1975-1976 Preliminary discussions with officials of the U. S. Department of Agriculture and members of the Congress.

1977-1978 Congress appropriated $100,000 for a feasibility study. The study team concluded that there was indeed an urgent need for a plant stress and water conservation research program and that Lubbock, Texas, was the ideal location for a laboratory facility. A later decision to locate the facility on the campus of Texas Tech University, in conjunction with the College of Agricultural Sciences, finalized the first major step in the development of the program.

1978-1979 Congress appropriated $800,000 for the preparation of a research program plan and architectural and engineering plans for the appropriate laboratory in which to carry out the proposed research. These plans have now been completed for Phase I. The structure will contain about 67,000 square feet of research space and will cost approximately $24,000,000 for construction. The facility contains space for twenty-two scientists, with accompanying greenhouses, headhouses, growth chambers and storage units.

The Science and Education Administration in August, 1979, transferred a USDA scientist (plant physiologist) to Lubbock, Texas, to serve as a cooperative scientist working with Texas Tech and Texas Agricultural Experiment Station scientists on environmental stress mechanisms in sorghum and cotton. Currently, Texas Tech is providing office and laboratory space for five USDA-ARS scientists who, together with Texas Tech scientists, are actively working in the research program. In addition, the University provides use of the library, computer and other University facilities as well as extending full faculty privileges to the USDA-ARS scientists.

1983-1984 Congress appropriated $500,000 for preparation of the architectural and engineering plans for Phase II of the laboratory, for review and finalization of all plans, and for development of final construction estimates. These plans are near completion.

1984-1985 Congress appropriated an additional $150,000 for support of the ongoing cooperative research program, bringing the total annual funding for the research program to $900,000 ($525,000 in Base Funds and $375,000 in Formal Budget Funds).

1985-1986 Congress appropriated an additional $250,000 for support of the ongoing cooperative research program, bringing the total annual funding for the research program to $1,150,000 ($525,000 in Base Funds and $625,000 in Formal Budget Funds).

1986-1987 Congress appropriated $1,150,000 ($525,000 in Base Funds and $625,000 in Formal Budget Funds) for support of the ongoing cooperative research program.

Funding of the Cooperative Plant Stress and Water Conservation Research Program

Year	Base Funds	Formal Budget Funds	Congressional Add-on Funds	Total Funds
1980	$ -0-	$ -0-	$ 200,000	$ 200,000
1981	200,000	100,000	100,000	400,000
1982	400,000	50,000	-0-	450,000
1983	525,000	225,000	-0-	750,000
1984	525,000	225,000	-0-	750,000
985	525,000	225,000	150,000	900,000
1986	525,000	375,000	250,000	1,150,000
1987	525,000	375,000	250,000	1,150,000
REQUEST-1988	525,000	375,000	800,000	1,700,000

RESEARCH ACTIVITY TO DATE

Through fiscal year 1987, Congress has appropriated a total of $5,400,000 for cooperative research in plant stress and water conservation. Scientists from USDA-ARS, Texas Tech University, and the Texas Agricultural Experiment Station have initiated studies within the framework of the research program plan developed to guide the orderly, systematic and effective search for the information needed to solve the problems identified in this statement. The scientists are making progress in better understanding the relative importance of various developmental and physiological responses of plants to soil water deficits and to atmospheric drought. A substantial amount of research has been initiated in the genetic improvement of grain sorghum and cotton. These crops can be grown in areas of limited rainfall. Research currently underway includes:

Soil-Root-Water Area: Research projects are designed to define the effect of the soil environment on rooting patterns (depth and root density) of sorghum and cotton as related to soil water extraction and water use efficiency. Soil environment is defined as a function of soil type, soil nutrient status and soil water status. These experiments should provide a definition of the ideal root system necessary to exploit the maximum soil volume with the least expense to the plant in terms of non-harvestable dry matter.

Soil-Plant-Atmosphere Area: Research projects are designed to delineate the major factors involved in determining photosynthesis: transpiration ratios of both sorghum and cotton. The role of the physical environment (evaporative demand and soil water supply) and the plant response (stomatal conductance to water and the photosynthetic rate) will be defined. The research is designed to identify the minimum level of leaf conductance necessary to support maximum photosynthetic activity in each specie under a wide range of soil water conditions.

Physiological Area: Experiments are designed to evaluate the utility of certain drought tolerance mechanisms. Of prime concern is osmotic adjustment resulting in turgor maintenance. The effect of increase osmotica on cellular metabolism is unknown, and will be defined with respect to chloroplast function. The major site of stress effects also will be defined as a function of source activity or sink activity. Important sinks include new leaf development, root development and fruit development. At present we do not know whether environmental stress affects the source directly or if the observed response is due to an indirect effect resulting from reduced sink activity. Prior to exploration of genetic variability and genetic manipulation it is essential to define the site of direct stress effects.

Results from the initial studies are extremely encouraging. This work has been conducted using existing Texas Tech University and Texas Agricultural Experiment Station space and facilities. This represents a substantial effort and demonstrates an extremely efficient use of the federal and state funds expended. Essentially every state in the Great Plains has devoted some scientific effort toward developing technology to conserve our water resources and utilize that water which is available more efficiently in crop production. However, due to the disaggregation of scientists, large environmental differences between research locations, and the diversity of plant responses elicited by water stress, there appear to be no major breakthroughs on the horizon. A unified research effort toward understanding and resolving the problem is necessary. To accomplish this effort, it will require additional funding, scientists and a highly specialized research facility.

With additional funds appropriated by the Congress, the cooperative research program developed by the U. S. Department of Agriculture-Agricultural Research Service, the College of Agricultural Sciences at Texas Tech University, and the Texas Agricultural Experiment Station will continue to mature and grow to fruition.

MAJOR BENEFITS OF THE RESEARCH PROGRAM

1. Substantial reduction in the water and energy requirements for the production of quality food and fiber crops throughout the semi-arid southwest.

2. Development of germplasm of major grain and fiber crops which possesses superior resistance to adverse environmental conditions and yet maintains an inherent high yield potential.

3. Development of the basic principles essential for the design of soil and crop management systems to conserve and make available during the growing season greater amounts of precipitation and to enhance the production of more stress-tolerant plants.

4. Maintenance of a high level of agricultural production throughout the Southern Great Plains, thereby preventing (a) the collapse of an important, highly-developed agricultural region and (b) the attendant economic, social and environmental problems which would ensue.

5. A substantial contribution to the national effort to enhance the productivity of American agriculture, thereby increasing the availability of feed grain and natural fiber commodities for sale to foreign markets.

As water efficiency of the key commodity plants is increased through the research program, less irrigation water per unit of crop yield will be required. Each inch of natural precipitation captured and stored in the soil will be used more efficiently. By substantially reducing the need for irrigation water, fuel and labor costs associated with irrigation will be decreased. If the plants perform under dryland conditions at a higher level of efficiency, the farmer's net earnings, assuming reasonable commodity prices, should be favorable. It is projected that research advances encompassed by this program result in a minimum 15% increase in water use efficiency.

THE PROPOSED LABORATORY

The feasibility study conducted by USDA recommended that a major research effort consisting of a central laboratory and support facilities be located on the campus of Texas Tech University. Three primary research thrusts have been outlined for the Plant Stress and Water Conservation Research Laboratory with specific objectives defined for each thrust. These are as follows:

Thrust 1 Characterize the dynamics of the soil-plant-atmosphere continuum.

Thrust 2 Define environmental stress impact on growth, development and yield, and mechanisms which aid plants in tolerating or avoiding environmental stress.

Thrust 3 Define genetic control of stress mechanisms.

CONCLUSION

The research program and proposed laboratory require a number of disciplinary teams in areas such as soil physics, soil chemistry, soil classification, plant physiology, plant breeding, agricultural engineering, and other allied areas requiring individual scientist input. This level of activity allows effective and efficient research activity to focus on critical questions relating to problems of plant stress and water conservation. Because of the complexity of the proposed research, and the resources needed to solve these pressing problems, this program will be of long-term nature. The program is being recognized as a national Center of Excellence for basic plant stress and water conservation research in agriculture. With the development of the program, the University is in a position to invite private industry scientists and research support to join the activity. Technical relationships have been established with the USDA-ARS Plant Gene Expression Center in California, the Southwest Consortium on Plant Genetics and Water Resources headquartered at New Mexico State University and the Los Alamos National Research Laboratory, and the Noble Foundation in Oklahoma.

Congress, in fiscal year 1977, appropriated $100,000 to initiate a feasibility study to determine the most appropriate size, program and location for the Plant Stress and Water Conservation Laboratory initially identified in Senate Document 59. That feasibility study was delivered to the Congress in March, 1978. In fiscal year 1979, Congress appropriated $800,000 to initiate planning for the research program and proposed facility in cooperation with Texas Tech University at Lubbock. In fiscal year 1983, Congress appropriated $500,000 to complete planning for Phase II and to finalize all plans and cost estimates needed for construction of the proposed laboratory. These plans are near completion. Near final architectural plans and specifications for the proposed laboratory have been delivered to the USDA-ARS. In fiscal years 1980, 1981, 1982, 1983, 1984, 1985, 1986, and 1987, Congress appropriated $200,000, $400,000, $450,000, $750,000, $750,000, $900,000, $1,150,000, and $1,150,000, respectively, for cooperative research in plant stress and water conservation.

It is proposed that Congress continue to recognize the urgency of the research program by appropriating funds at the level of $550,000 over the current budget allocation of $1,150,000 ($525,000 Base Funds plus $625,000 Formal Budget Funds) for this project to continue and strengthen the cooperative plant stress and water conservation research program. This will bring the total research funding for FY 1988 to $1,170,000. It is further requested that the Congress appropriate $24,000,000 for the construction of the Plant Stress and Water Conservation Laboratory in fiscal year 1988 on the land provided by Texas Tech University.

Thank you Mr. Chairman, for your consideration of this proposal.

National Telephone Cooperative Association

STATEMENT OF CLAYTON FEGLEY, PRESIDENT, NORTH DAKOTA ASSOCIATION OF RURAL TELEPHONE COOPERATIVES ON BEHALF OF THE NATIONAL TELEPHONE COOPERATIVE ASSOCIATION

Senator BURDICK. Now we have the appearance of another North Dakotan, Mr. Clayton Fegley, president of the North Dakota Association of Rural Telephone Cooperatives, representing the National Telephone Cooperative Association.

Mr. FEGLEY. Thank you, Mr. Chairman. I am happy to be here in front of your committee. I would like to present the full testimony for the record.

Senator BURDICK. It will be made part of the record, without objection.

Mr. FEGLEY. My name is Clayton Fegley. I am currently serving as the president of the North Dakota Telephone Association, and I am a member of the board of directors of the Souris River Telephone Mutual Aid Cooperative in Minot, ND.

Today, I also represent the National Telephone Cooperative Association, a national trade association representing over 450 small telephone systems serving rural consumers in over 40 states.

Souris Telephone Cooperative serves approximately 11,695 customers in the rural part of the northern North Dakota. We have an average density of 2.6 subscribers per mile of telephone line, a very low density any way you look at it, especially when compared to the telephone industry as a whole, which averages 50 customers per mile of line. The Bell Companies serve about 130 customers per square mile. We have 90 employees.

We are strong supporters of the REA program. REA has made it possible for areas like ours to have telephone service.

As the subcommittee members know, the administration's budget would terminate the REA program faster than prior, unsuccessful administration proposals. Mr. Chairman, this proposal is particularly unfair because telephone deregulation has caused uncertainty throughout the industry and because of the current recession in rural areas. We urge Congress to reject this budget for the following reasons:

Several major shifts in state and national telecommunications policies could have a significant impact on the revenues of many borrowers in the near future, reversing or diminishing historical revenue and net income trends.

In the competitive, deregulated environment, local telephone companies are asked to provide more sophisticated services. With the help of REA telephone loan programs, rural telcos are able to replace obsolete equipment in order to provide better services to their customers.

Most REA telephone borrowers are not generally able to borrow from commercial lending sources. REA borrowers have an average net worth of about 30 percent, well below the 40 to 60 percent net worth ratios sought by the private lenders. Systems unable to qualify for commercial loans now won't be eligible to participate in the administration's proposed 70 percent guarantee loan program that would take the place of the current REA and RTB loan programs.

More than 10 percent of customers in REA borrower-served areas have inadequate two, four, and even eight party service.

REA borrowers continue to serve high cost areas. To provide universal service at affordable rates, we need an REA loan program.

For the past 3 years, REA has failed to meet the minimum loan levels established by Congress. REA critics contend that additional

REA telephone loan funds are not needed because the demand was lower during fiscal year 1986 than in prior years. However, by the end of the fiscal year, REA still had a backlog of loan applications totaling $360 million.

Failure to meet authorized loan levels reflects the administration's attempt to terminate the REA program through administrative bottlenecks and regulations. For example, the excessively long application approval time for telephone loans reduces the number of loans approved. A GAO study states that electric loans on the average took 79 days to process, while those for telephones takes an average of 6 months.

REA now lacks sufficient technically qualified staff to timely process loans as a result of staff reductions and reorganizations. Since 1980, the agency has reduced the number of staff by 206 positions, a 28-percent reduction. This means long approval time, and reduces the number of actual loans approved.

Quite strong language for the past 2 years stated that no funds are available for changes in the engineering standards division. REA recently combined the engineering and standards division and the management division to form the telecommunications staff division.

In the process, the importance of the engineering and standards function was deemphasized and seven technical positions were deleted, four in the transmission branch and three in the outside plant branch. Four other key technical staff are expected to resign this fiscal year.

In order to guarantee that REA meets the minimum levels established by Congress, we request that REA be instructed to retain sufficient technically qualified personnel to process loans in a timely manner.

We also encourage the committee to reject any proposal to auction radio spectrum and instead encourage the Federal Communications Commission to work with industry officials to improve the current system.

Mr. Chairman, once again we thank you for your support of the rural telephone system, as we work through REA programs to improve the quality of life in the rural areas, and small towns.

Senator BURDICK. Thank you very much.

Mr. Fegley, in your statement, you mention that many telephone systems do not have the equity to get a loan in the private market. I made the same statement to the administration. They said that the loans are not going to be based on equity, but on revenue flows. In your experience, is that true?

Mr. FEGLEY. They are starting to look at both, but as I look at that, when we have to borrow our capital, the high capitalization, and low revenue, I really believe that the high interest rates will diminish our cash flow in the deregulated phase that we are in.

When they are talking about projected cash flows, they are talking about protected cash flows. I really don't see how we could give a real positive cash flow projection in the telephone industry at this time.

Senator BURDICK. If the RTA program is being abandoned by the government, what, in your opinion, is the availability of credit through normal financial sources?

Mr. FEGLEY. I think it will be limited, and it will really diminish the capability of what our telephone coops in North Dakota can do. The equipment is 30 years old. It is obsolete. It is outdated. We no longer are able to get parts for the equipment. We have to change it.

It will greatly affect the reliability of the phone systems that the people need out there. I really believe that commercial lenders, with the low equity base that we have out there, would be very skeptical in lending us the large amounts of money that we need.

Senator BURDICK. I agree with you. Thank you very much.

Mr. FEGLEY. Thank you, Senator.

[The statement follows:]

STATEMENT OF CLAYTON FEGLEY

Good morning, Mr. Chairman and members of the Committee. My name is Clayton Fegley, I am currently serving as the President of the North Dakota Telephone Association and I am a member of the Board of Directors for Souris River Telephone Mutual Aid Cooperative in Minot, North Dakota. Today, I also represent the National Telephone Cooperative Association (NTCA), a national trade association representing over 450 small telephone systems serving rural consumers in over 40 states. I appreciate the opportunity to present testimony to this committee on a subject of great importance to Souris Telephone Cooperative and other NTCA members -- the Rural Electrification Administration (REA) and its telephone programs.

Souris Telephone Cooperative serves approximately 11,695 customers in the rural part of northern North Dakota. We have an average density of 2.6 subscribers per mile of telephone line, a very low density anyway you look at it, especially when compared to the telephone industry as a whole which averages 50 customers per mile. The Bell Companies serve about 130 customers per square mile. We have 90 employees.

Like other NTCA members, making affordable telephone service universally available to our customers in rural areas, with quality equal to that of urban telephone service, is our first priority. This is why we find the Administration's FY 1988 budget proposals for REA so distressing.

Administration's Budget Proposal

As the subcommittee members know, the Administration's budget would terminate REA programs faster than prior, unsuccessful Administration proposals. The Administration now proposes to eliminate the direct loan program, the 100% REA guaranteed loans, and the Rural Telephone Bank (RTB) loan program by September 30, 1989. These programs would be replaced with a new program of privately originated loans partially backed by REA for those eligible to participate. All direct federal support for these programs would end before October, 1989. The Administration also proposes asset sales which would include the sale of $1.0 billion of direct loan assets from the Rural Electrification and Telephone Revolving Fund (RETRF) for about $653 million and $500 million of Rural Telephone Bank assets for about $449 million.

Mr. Chairman, this proposal is particularly unfair because telephone deregulation has caused uncertainty throughout the industry and because of the current recession in rural areas. We urge Congress to reject this budget for the following reasons:

- Several major shifts in state and national telecommunications policies could have a significant impact on the revenues of many borrowers in the near future, reversing or diminishing historical revenue and net income growth trends. For example, the new plan for the allocation and recovery of Non-Traffic Sensitive (NTS) plant will reduce interstate long-distance revenues.
- In the competitive, deregulated environment,local telephone companies are asked to provide more sophisticated services. For example, digital switching is needed to provide FCC-mandated equal access to alternative long distance carriers and to provide many of the new custom calling services sought by subscribers. Underground cable provides more reliable, higher quality transmission and is needed to reduce maintenance and frequent outages caused by the harsh weather conditions in many rural areas. With the help of the REA telephone loan programs, rural telcos are able to replace obsolete equipment in order to provide better services to their customers.
- Most REA telephone borrowers are not generally able to borrow from commercial lending sources. REA borrowers have an average net worth of about 30%, well below the 40-60% net worth ratios sought by the private lenders. Our small system has a net worth of only 21%. About one-half of all REA telephone borrowers are not financially strong enough to qualify for higher interest Rural Telephone Bank loans for even part of their financing needs. We have never received a bank loan. Systems unable to qualify for commercial loans now won't be eligible to participate in the Administration's proposed 70% guarantee loan program that would take the place of the current REA and RTB loan programs.
- More than 10% of customers in REA borrower-served areas have inadequate two-, four- and even eight party service. To avoid two classes of telecommunications systems, these party lines must be converted to single

party service. In addition, there are still many Americans without telephone service. Based on the 1983 Annual Housing Survey of the Bureau of the Census (the most recent data available) an estimated 2.3 million rural households do not have telephone service.

- REA borrowers continue to serve high cost areas. Providing telephone service to high-cost rural areas is uneconomical without government assistance. While urban phone systems may reach thousands of customers per mile of line, REA telephone borrowers reached an average of 5.8 customers per route mile of line, with an average investment of $1,945 per customer (1983 figures). One-fourth of these rural systems have less than 1,000 subscribers and one-half of them less than 2,000. The median REA/RTB borrower had a net increase in its number of subscribers from 2,064 to 2,076 in 1985. To accomplish this net growth of only 12 customers, the median system constructed 80 miles of facilities - an average of almost 7 miles for each customer added.

REA Failed to Meet Minimum Loan Levels

For the past three years, REA has failed to meet the minimum loan levels established by Congress. REA critics contend that additional REA telephone loan funds are not needed because the demand was lower during Fiscal Year 1986 than in prior years. However, by the end of the fiscal year REA still had a backlog of loan applications totaling $360 million.

Failure to meet authorized loan levels reflects the Administration's attempt to terminate the REA program through administrative bottlenecks and regulations. For example, the excessively long application approval time for telephone loans reduces the number of loans approved. A GAO study states that electric loans on the average took 79 days to process, while those for telephones take an average of 6 months.

REA now lacks sufficient technically qualified staff to timely process loans as a result of staff reductions and reorganizations. For example:

- Since 1980, the agency has reduced the number of staff by 206 positions, a 28% reduction.
- REA transferred the Assistant Administrator for Telephones to become the Assistant Administrator for Electrics and the Assistant Adminis-

trator for Electrics to become the Assistant Administrator for Telephones. Neither individual has any previous experience working in their new area of assignment.

- For the past two years, House and Senate Appropriations Committee Report Language has stated: "...that no funds are available for changes in the Engineering Standards Division."

Disregarding this notice, REA recently combined the Engineering and Standards Division and the Management Division to form the Telecommunications Staff Division. In the process, the importance of the engineering and standards function was de-emphasized and seven technical positions were deleted, four in the transmissions branch and three in the outside plant branch. Four other key technical staff are expected to resign this fiscal year.

Auction of Radio Spectrum

The Administration's budget includes a proposal to auction unassigned radio spectrum to the highest bidder. Small telephone companies serving rural areas are primary communications providers in their areas. Under the present system they are able to compete fairly and on an equal basis with other potential licensees. The auction proposal favors large, wealthy companies. Small wireline carriers with limited resources would effectively be precluded from obtaining licenses.

Conclusion

NTCA urges the Committee to reject the Administration's REA budget proposal in total. Instead, we urge you to freeze REA and RTB lending at the FY 1987 authorized levels:

Insured Loans	$239,250,000 - 311,025,000
RTB Loans	$177,045,000 - 210,540,000
Guarantees	$119,625,000 - 138,765,000
RTB Capitalization	$30,000,000

In order to guarantee that REA meets the minimum levels established by Congress, we request that REA be instructed to retain sufficient technically qualified personnel to process loans in a timely manner.

We also encourage the committee to reject any proposal to auction radio spectrum and instead encourage the Federal Communications Commission (FCC) to work with industry officials to improve the current system.

NATIONAL RURAL TELECOM ASSOCIATION

STATEMENT OF JOHN F. O'NEAL, GENERAL COUNSEL

Senator BURDICK. Our next witness will be Mr. John F. O'Neal, general counsel of the National Rural Telecom Association.

Mr. O'NEAL. Thank you, Mr. Chairman.

If I may put in my 2 cents' worth on the previous question, Texas Tech University is not going to have near as good a football team next year as my alma mater, Bentley University.

Senator BURDICK. Now we have gotten this out of the way.

Mr. O'NEAL. Thank you very much, Mr. Chairman. I am pleased to appear again this year concerning the REA program. I recognize the committee's time constraints, and I will summarize my written statement, and limit my oral comments to a few major points.

The National Rural Telecom Association, the association that I represent, represents commercial telephone companies that borrow from REA. The association is committed to the continuation of a strong and viable REA program. Our reasoning is very simple, Mr. Chairman. The loan programs of REA provide quality telephone service to rural people at reasonable rates, which otherwise would not be possible.

The administration has again this year come forward with a number of radical proposals designed to achieve only one thing, the complete devastation of the REA program as we know it. Labeled as major new initiatives, most are the same shop-worn proposals that have been rejected year after year by previous Congresses.

If Congress accepted them, one thing is certain, the cost of providing rural telephone service will go up, and service levels will go down.

There is one new wrinkle this year, the proposal to guarantee only 70 percent of the principal amount of privately placed loans. We submit that this is a proposal that has not been studied thoroughly for feasibility or well thought out. Yet, we are being asked to trade the entire REA program for it.

We believe that it is unnecessary. The act now provides for 100 percent guarantees of principal and interest. No one has determined whether a 70-percent principal only guarantee would attract private lenders, you pointed that out, and if so, at what price. Higher priced credit would translate simply into higher rural telephone rates, if the credit were available at all.

The loan origination fee that the administration proposes in addition could be as high as 11 or 12 percentage points of the loan amount in the first year depending upon the size of the program, and this is over $1 million on a $10 million loan.

We believe that this is just another scheme to raise interest rates and make the program less attractive. This fee would be on top of the full market interest rate that is also being proposed.

Who could borrow from REA under those conditions, and who would suffer as a result?

The next issue is the telephone holding companies. The administration states correctly that loans are being made to large holding companies. Fortunately, the act does not discriminate against rural subscribers on the basis of which company provides them service. That is sound public policy, Mr. Chairman.

In fact, the Bell operating companies, along with every other local telephone company providing service in rural areas are eligible to borrow from REA, and that is as it should be. The beneficiaries of the act are the rural people being served, not the company providing the service that is borrowing from REA.

These borrowers are public utilities and as such they are subject to state regulation, and their rates are based upon their costs. The benefits from the loans from the REA are passed through directly to ratepayers in the form of better service at lower rates. We believe that the act should continue to be open to all providers of rural telephone service.

The administration also charges that the REA borrowers are serving urban, suburban, and recreational areas which was never intended by Congress. The REA Act has one of the most restricted definitions of a rural area of any federal law. Cities or towns with more than 1,500 inhabitants are not considered rural, thus are not eligible for REA assistance.

By the same token, the act requires the borrowers to serve the largest practical number of rural users. The borrowers cannot pick and choose who they will or will not serve. The basic purpose of the act is to develop rural areas with efficient telecommunication, and to serve everyone in the service area. To the extent that the administration charge is true, it means that the act is working.

Tourism is an industry just like any other which develops rural areas and provides jobs and economic growth. But, by and large, the areas served are at least rural by any definition. Subscriber density is about four per square mile compared to over 100 for the Bell Companies.

REA borrowers serve over 1 million square miles, or 34.5 percent of the territory, but less than 5 percent of the telephones. If Congress were to limit those areas considered suburban or recreational, it would likely increase the cost of providing service to not only those subscribers eliminated from the program, but also to those remaining as well.

We believe that these proposals, for the reasons indicated, are misguided and should be rejected. We also believe and recommend to the committee that the loan levels be frozen again this year at last year's levels.

We also believe that a strong rural telephone bank lending program is vital to the future of rural telephony, and recommend that $28.7 million be provided in fiscal year 1988 for the first class A stock.

Mr. Chairman, again this year, the REA program is facing great challenges. It can withstand these annual assaults because it is a sound federal program that is tried and tested, and it works. It is needed today more than ever before. A strong, viable REA program is necessary if we are to have quality telephone service in rural areas at reasonable subscriber rates.

I certainly want to echo the comments indicated here by Senator Gore about the need for rural development in rural areas. The REA program is a vital part of that rural development.

Thank you, Mr. Chairman.

Senator BURDICK. Thank you.

Mr. O'Neal, every year we set loan levels. Can you tell me to what extent REA has met those loan levels in the telephone program?

Mr. O'NEAL. Mr. Chairman, I have to admit to the committee that for the last three consecutive years, the REA Administrator has failed to meet the minimum loan levels established by this committee, despite the fact of availability of loan applications that were pending during that time.

Senator BURDICK. What is the reason for not meeting the loan levels?

Mr. O'NEAL. We have recently learned that the Office of Management and Budget submits some sort of quarterly quotas to the REA Administrator, which the REA Administrator has admitted does delay and impact on his ability to approve loans. I think also that the burdensome procedures at REA inhibit loan approval and delay the loan process.

Senator BURDICK. Thank you very much.

Mr. O'NEAL. Thank you, Mr. Chairman.

[The statement follows:]

STATEMENT OF JOHN F. O'NEAL

SUMMARY OF TESTIMONY REQUESTS

Project involved:	Telephone loan programs administered by the Rural Electrification Administration	
Actions proposed:	1.	A continuation of the freeze on loan levels for the insured, guaranteed and Rural Telephone Bank lending programs in the ranges authorized for FY 1987.
	2.	An appropriation of 28.7 million dollars for the purchase of Class A stock by the government in the Rural Telephone Bank, representing the capital increment for FY 1988.
	3.	Inclusion of the same provision as in the FY 1986 and 1987 Acts prohibiting the denial or reduction of loans or loan advances based upon a borrower's level of general funds.

Mr. Chairman, Members of the Committee:

My name is John F. O'Neal. I am General Counsel of the National Rural Telecom Association. Our association is comprised of commercial telephone companies who borrow their capital needs from the Rural Electrification Administration to extend and modernize telephone service in rural areas. Approximately 1000, or 71% of the nation's telephone companies borrow from REA. They serve almost 5 million subscribers in 46 states. In accepting these loan funds, borrowers assume an obligation under the Act to serve the widest practical number of rural users within the service area.

Mr. Chairman, continuation of a strong REA program is very important to rural America. It is imperative that this vital program not be jeopardized by philosophical opposition or by unrealistic assessments of program needs. This Committee and the Congress as a whole has strongly supported the REA telephone program since its inception in 1949. We appreciate your past efforts and look forward to an even stronger REA program for the future.

Ongoing Need for the REA Telephone Loan Programs

Because of ongoing budget constraints, our association is recommending again this year that loan levels be frozen at last year's levels. These are the ranges your Committee approved for FY 1987:

REA Insured Loans	$239.3 - 311.0 million
Rural Telephone Bank Loans	$177.0 - 210.6 million
REA Loan Guarantees	$119.6 - 138.8 million

As in the past, we want to reiterate our willingness to accept reductions in program levels if the Committee believes that is necessary to achieve its overall budget objectives. However, we believe that reductions in the REA program should be generally proportionate to reductions in other federal programs and not designed merely to accomplish ideological or philosophical purposes as has been suggested by the Administration.

Administration's FY 1988 Proposals

Proposals contained in the President's budget again this year would severely curtail and ultimately phase out the REA program as we know it. For FY 1988, insured loans would be reduced to $32 million and Rural Telephone Banks loans to $93 million. Both the insured loan program and the Rural Telephone Bank and its lending program would be phased out by 1990. 100% guarantees of loans under existing law would be replaced by REA guarantees of 70% of the principal only for loans originated in the private market. Under a still undefined criteria borrowers deemed to be serving "urban/suburban and recreation" areas would be eliminated from the REA program along with those which are subsidiaries of "larger holding companies". Interest rates would be increased on insured loans to Treasury cost of money plus 1/8 percent and substantial loan origination fees would be imposed on borrowers to cover REA's $27 million annual administrative costs. If adopted, these proposals would result in a complete devastation of the REA program. Mr. Chairman, there still have been no studies conducted which would support such radical proposals. No one knows for certain what the full impact or effects would be. But, one thing is certain: rural telephone rates would increase further and service levels would surely deteriorate.

As of October 1, 1986, there were over $327.6 million in pending loan applications from 91 borrowers. I know the Committee will agree that these figures, furnished by REA, amply demonstrate the ongoing need for this important program.

Lack of Availability of Private Credit

Critics of REA argue that the need for the program is over because borrowers have the ability to borrow from private sources. But let us examine that. Private market lenders normally require 40 to 60 percent equities before they will extend credit. Based upon the latest available REA statistics, the average telephone borrower at the end of the 1985 had a net equity of 30.1 percent. Private lenders also require a one and one-half times interest coverage ratio test and prefer a ratio of 2 or higher. Most borrowers cannot meet the minimum test much less the preferred one. Also it is important to note that most REA borrowers in relation to other telephone companies are very small and the territory they serve is extremely sparse. They serve 1,248,025 square miles or 34.5% of the territory but less than 5% of the telephones. REA borrower density is about 4 access lines per square mile. The Bell system's is over 80.

Rural Telephone Bank

In 1981, Congress authorized the additional government purchase of $300 million of Class A stock from the Rural Telephone Bank in the amount of $30 million per year for 10 years. Again this year the President's budget contains no request for this funding.

Congress originally established the Rural Telephone Bank in 1971. Its purpose is to provide a supplemental source of financing for REA telephone borrowers who can afford to pay higher rates of interest, thus relieving the pressure on the insured loan program. The bank is required under its enabling legislation to lend at its average cost of moneys.

It has proved to be a highly successful institution. Each annual increment of capital is vital to the full capitalization of the Bank, enabling more and more insured program borrowers to utilize bank financing fulfilling Congress' objectives. This Committee and the Congress as a whole has recognized the essential nature of this ongoing additional capitalization process by providing funding for each of the first six fiscal years, 1982-1987.

The purpose for government purchase of Class A stock in the Bank is to attain a lending rate somewhere between the insured lending rate and the full Treasury rate. The infusion of the Class A stock each year permits the Bank effectively to achieve this rate, enabling more borrowers to be weaned away from the five percent statutory insured rate. The bank rate currently is 6.75 percent.

The Rural Telephone Bank is the cornerstone of financing for REA telephone borrowers for the future and hopefully, will be the institution which will ultimately provide all of the debt capital needs for rural telephone systems. Fulfillment of the Bank's capital structure is a vital factor in this process. Therefore, we respectfully request that the Committee continue the appropriation of $28.7 million next year for government purchase of Class A stock in the Rural Telephone Bank.

Conclusion

Mr. Chairman, the REA program continues to face its greatest challenges. However, it withstands these annual assaults because it is a sound federal program that has been tested and works. And, it is needed today more than ever before. Rapid technological change and policies of competition and deregulation in the telephone industry underscore the need for targeted assistance to rural areas. Rate pressures in rural areas are already burdensome with predications that some rates will double or even triple in the foreseeable future. Without the credit assistance provided by REA, even greater pressure would exist for rate increases.

Also, many fail to recognize that without the REA program the quality of telephone service in rural areas would also deteriorate. That is certain because the REA Act imposes a higher standard of service on borrowers than would otherwise be required. In the old days, if carriers provided service at all in rural areas it was only down the main roads because service on any other basis was not economically feasible. Today, thanks to the Congress and the REA legislation, telephone service is provided to the "widest practicable number of rural users" in each borrower's service area -- a mandate that REA strictly enforces.

For the third straight year, REA last year failed to meet the minimum telephone loan levels established by this Committee and the Congress even though there was a substantial backlog of completed applications at the agency -- over $117 million at the end of the fiscal year. Despite continued admonitions by the Congress, the processing of loan applications at REA continues to be burdensome and time consuming. Thanks to the efforts of this Committee a substantial impediment to loan advances and approvals has been eliminated -- REA's general funds restrictions. We hope and recommend that the Committee extend the general funds prohibition in the FY 1988 bill. Otherwise, the operation of the REA telephone program will be jeopardized even further.

UNITED STATES TELEPHONE ASSOCIATION

STATEMENT OF JAMES DAMON

Senator BURDICK. The next witness will be Mr. James Damon, United States Telephone Association.

Welcome to the committee.

Mr. DAMON. Thank you, Mr. Chairman, and good morning.

Mr. Chairman, and members of the committee, my name is James Damon, and I am president and general manager of Oregon Telephone Corp. in Mount Vernon, OR. I am appearing before you today as a representative of the United States Telephone Association.

In the interest of brevity, Mr. Chairman, you do have a full text of my testimony, and I would like to include it in the record.

Senator BURDICK. Without objection, all of the witnesses' statements will be in the record.

Mr. DAMON. Thank you, sir.

The United States Telephone Association represents over 1,100 member companies, including the Bell operating companies. Together, our members provide over 99 percent of all the telephone services in the United States through firms ranging from publicly held corporations to small family companies and cooperatives.

We are dedicated, Mr. Chairman, to fulfilling two goals. The first is serving our nation's telecommunications needs and, second, universal service throughout our country. To this end, we firmly believe that in order to maintain a healthy and growing telecommunications industry, the funding mechanism provided by a strong and viable REA program is essential.

With this in mind, the summary of our recommendations to your committee and the Congress is that the REA telephone loan program authorization for fiscal year 1988 remain at the same level as that approved for fiscal year 1987; that you continue the important job of fully capitalizing the rural telephone bank; freezing the REA administrative budget at the 1987 levels and encourage REA to ensure that adequate personnel are available to perform their statutory functions; and, lastly, that you continue the congressional mandate for reduced REA regulation of telephone borrowers' general funds.

We understand the continued budget restraints that Congress must face, but the administration's fiscal year 1988 budget for REA does not reflect budgetary goals. Instead, it is a calculated attempt to butt the REA program.

This year's budget, like those in previous years, would reduce the available loan funds. In addition, it would reduce even further the REA staff, and proposes to eventually phase out all REA and RTB direct lending.

In the last 10 to 15 years, REA borrowers have made great strides to upgrade services to their customers, yet much remains to be done in the area of replacement of aerial cable and wires with buried cable, and replacement of other mechanical switches with digital technology, with an estimated overall price tag of approximately $3.3 billion.

The proposition for this is that our industry is witnessing almost unbelievable technological change. Just in the past few short years, we have seen the advent of satellite transmission, transmission of voice and data by fiber optic cable, cellular radio, plus digital and computer capabilities available to every home and business.

The rural areas need to have, in fact, are entitled to this new technology just as well as the urban areas, but it is vastly more expensive to provide, given the sparse settlement of the rural areas.

If the REA program were not funded, it is questionable whether the commercial market could or would provide the capital for the average REA borrowers. There are three basic problems with obtaining capital from the private sector.

First is the fact that most borrowers are very small, having fewer than 2,000 customers.

The second is their high debt ratio, with an average for all borrowers of approximately 75 percent of their total financing.

Third is their comparatively low earnings. The combination of these does not look well on financial statements to commercial lenders.

There is one point that I believe, Mr. Chairman, is important for everyone to remember, and it is that the REA program only makes funding available for the construction and for the extension of communications facilities. It does not provide operating capital.

In the over 35 year history of the REA program, approximately $1 billion has been repaid and there has never been a default. Truly a record of which the Congress, the administration of REA, and the management of the telephone borrowers can be justly proud.

The highest and best use of our rural areas is to be the breadbasket of our nation. To do that there must remain vast expanses of space, but because of that they are expensive to serve. We must not forget that telephone service is vital to the cost effectiveness of those products produced by rural America that keep urban America alive and well.

In addition, strong rural areas help us meet our balance of trade problems, generate tax revenues for federal, state, and local governments, and stimulate employment. Affordable, with emphasis on the word "affordable," and dependable communication services make a substantial contribution to that strength, and there can be no question that the REA program is the vehicle necessary to provide financing for that service.

Mr. Chairman, I thank you for the opportunity to appear before your committee this morning.

Senator BURDICK. Thank you for an excellent statement, and an excellent message.

[The statement follows:]

STATEMENT OF JAMES W. DAMON

Opening Remarks

Mr. Chairman and Members of the Subcommittee, I am James W. Damon, Chairman of the Board of the Oregon Telephone Corporation, Mt. Vernon, Oregon, appearing before you as a representative of the United States Telephone Association (USTA). USTA represents over 1100 member companies, including the Bell operating companies. Together, USTA members provide over 99% of all access lines in the United States through firms ranging from publicly held corporations to family owned companies and companies owned by the customers. I am presenting this testimony in the interests of the members of USTA and the subscribers whom they serve.

The nation's local telephone companies are dedicated to fulfilling two goals - serving the nation's telecommunications needs and maintaining universal service. USTA members, large and small, firmly believe that in order to maintain a healthy and growing rural telephone industry that provides universal telephone service, the targeted assistance offered by a strong and viable Rural Electrification Administration (REA) is essential.

Summary of Recommendations

The United States Telephone Association (USTA) recommends the following for the REA Telephone Program:

- The continuation of a strong REA program and universal service.
- Financing:

  a. maintaining the fiscal year 1988 telephone loan program authorization at the same levels approved for fiscal year 1987:

REA Insured Loans	$239,250,000-$311,025,000
Rural Telephone Bank Loans	$177,045,000-$210,540,000
REA Loan Guarantees	$119,625,000-$138,765,000

  b. continuing the important task of fully capitalizing the Rural Telephone Bank (RTB).

  c. rejecting the Administration's request for rescission of the fiscal year 1987 capitalization of the Rural Telephone Bank.

  d. freezing the REA administrative budget at the 1987 levels and encouraging REA to ensure that adequate personnel and equipment are available to perform its statutory function.

  e. continuing Congressional mandate for reduced REA regulation of telephone borrowers general funds.

We understand the continued budget restraints Congress must face, but the Administration's fiscal year 1988 budget for REA does not reflect budgetary goals. Instead, it is a calculated attempt to gut the REA program. The Administration's proposed fiscal year 1988 budget, like the proposals of the last several years, would effectively eliminate reduced interest rate loans for rural areas and would severely reduce available loan funds. In addition, the budget proposal would reduce even further the

REA staff and eventually phase out all REA and Rural Telephone Bank (RTB) direct lending.

Need for Financing

Utilities as an industry are capital intensive and rural telephony is no exception. All utilities need to invest relatively large sums of capital to extend service, modernize plant and provide new services. Rural utilities generally have higher costs and need relatively greater sums of capital to maintain universal service.

The vast majority of REA borrowers' switching offices still have mechanical step-by-step technology. To provide new services that urban customers will have and to continue the present level of telephone service, new switching offices will be needed. Maintenance of the old step-by-step offices is getting more expensive and parts are getting scarce.

In the last 10 to 15 years, REA borrowers have upgraded to mostly one party service. The bulk of the investment to accomplish this has been in buried cable, aerial cable and other equipment to provide the prevailing quality for voice grade service. The service life of this equipment varies, but experience demonstrates that a 15 year service life is not uncommon.

Given the need to update switching centers and the requirement to begin replacing outside plant, maintaining the 1987 authorized lending levels for REA is essential for the establishment of universal service in rural America. The job in rural areas requires a continuing commitment; it is certainly not done.

The REA Telephone Loan Program Aids Rural Development

Telephone service in rural areas is an essential part of the infrastructure that contributes to the development of rural America. It yields significant returns to the economy in terms of increased production, both agricultural and non-agricultural, helps reduce balance of trade problems, generates additional tax revenues for Federal, state and local governments, and stimulates employment.

At this time in our history, when many rural areas are undergoing a severe financial hardship and a profound transformation in the structure of their economies, the worst thing that could happen would be to pull the plug on the REA program.

The REA telephone program of loans, not grants, for construction of facilities, not operation of companies, has never had a default in its 35 year history. It is a model program of rural development. If anything, the REA program should be copied, not eliminated.

REA Helps Rural Americans

There is little argument that good, dependable telephone service is a necessity of modern life. Without the REA program, the quality of telephone service would deteriorate. The REA Act and REA standards ensure that good telephone service is provided to the "widest practicable number of rural users" in each borrowers service area.

The REA program assures the availability of telephone service in rural areas in two ways. First, it provides the necessary capital to fund extension and improvement of facilities. Second, the relatively low cost of that capital enables rural telephone systems to provide telephone service at reasonable rates. After all, having a telephone line extend to a household where high rates make service unaffordable is the same as having no telephone facilities at all.

Thank you for this opportunity to present the views of the United States Telephone Association concerning this vital program. We hope you will support our recommendation for the continuation of a strong and viable REA telephone loan program.

NATIONAL RURAL WATER ASSOCIATION

STATEMENT OF CLARK CRONQUIST, PRESIDENT

ACCOMPANIED BY VERN ANDERSON, PRESIDENT, NORTH DAKOTA RURAL WATER ASSOCIATION

Senator BURDICK. Our next witness is Mr. Clark Cronquist, president of the National Rural Water Association.

Mr. CRONQUIST. Thank you, Mr. Chairman. My name is Clark Cronquist, and I am the president of the National Rural Water Association, and director of the North Dakota Rural Water Association.

I want to thank you and other members of the committee for the opportunity to speak before you today. The gentleman with me is Vern Anderson from North Dakota, president of the North Dakota Rural Water Association. We are both from North Dakota, and owners of the two hockey teams and the football team.

We have submitted written testimony for the record, but I would like to briefly highlight the points of that testimony.

Our major request is that the FmHA rural water grant and loan program be held at last year's level of $330 million in loans, and $109 million in grants.

Rural water is the backbone of rural development in North Dakota as well as in other rural areas. The FmHA program is the primary, and often the only source of funding for most small rural communities. The loan program has a delinquency rate of under 1 percent, and it is one of the best administered programs in the nation.

We are also requesting your assistance in continuing and expanding the funding for Rural Water Circuit Rider Technical Assistance Program. The circuit rider made 14,774 technical assistance visits to rural water systems in 33 states last year. Circuit riders help small rural water system managers to cut costly water loss, improve management and operations, and to meet the increasingly difficult federal regulations under the Safe Drinking Water Act.

As the problems of the small water systems grow, the availability and assistance of circuit riders has become increasingly important. Circuit riders currently are working on a priority basis, but cannot keep up with the number of calls they receive asking for assistance.

This year over 3,000 FmHA loans will be sold through private loan portfolio sales. The borrowers of these loans will be cut off from the

FmHA state and district administrative and engineering support. The circuit riders will be their primary source of operation and management system. These loans will be sold in all 50 states, yet circuit riders will cover only 37 states by the end of the year.

We are requesting that you increase the circuit rider program by $800,000 to enable the program to operate in all 50 States. If we are going to have these strong rural water programs nationwide in the future, there needs to be a circuit rider available to every small rural water system faced with management and financial or federal regulatory problems.

Thank you very much for your past support and the support of other committee members for the funding of the FmHA grant and loan programs, and for the circuit rider program. We believe rural folks have fully utilized these scarce funds, and we are asking that you continue these support programs in the future.

Senator BURDICK. Thank you very much for an excellent statement.

You indicate that the circuit rider program is now in 33 states, and you want to have it in all the states. Is there a need for it in each state?

Mr. CRONQUIST. Yes, there is, sir. The sort of assistance that we are getting in the 33 states shows that there is the need, and the other states don't have the circuit riders and they would benefit from them greatly. The small rural water systems have really nowhere to go because they don't have the funds in their local communities to afford that kind of support.

Senator BURDICK. What are your views of the Farmers Home Administration selling off these loans to generate more money for the government?

Mr. CRONQUIST. We discussed the situation at the National Rural Water Association. It is the law as passed by Congress, we intend to support it and to try to make it work.

We have been assured by the agency that nothing will change. The only thing that will change will be the fact that you are sending the check for payment of your debt to maybe a different address. That is the only difference.

They have assured us that there will be technical assistance provided on the financial matters that will help us. So I guess we will have to go along with this.

Senator BURDICK. Thank you very much.

[The statement follows:]

STATEMENT OF CLARK CRONQUIST

Mr. Chairman, thank you for allowing me, as President of the National Rural Water Association and as a Director of the North Dakota Rural Water Association, to appear before this important Committee today. We want to express our deepest appreciation for the help you have provided in the past for the Farmers Home Administration rural water grant and loan program and for our special rural water circuit rider technical assistance program. We are here today to request the continued support of you and the Committee for these two very important rural programs.

Specifically, we are requesting:

- funding for the FmHA rural water and sewer grant program at $109 million and the loan program at $330 million

- funding for the Circuit Rider technical assistance program at $2.9 million to allow the program to expand to all the states

We are requesting your continuing help because rural water systems are facing difficult times. The ever expanding Environmental Protection Agency's Safe Drinking Water Act (SDWA) regulations place new requirements on the monitoring and testing of the water quality in small rural water systems. The reduction in FmHA grant and loan funds over the past five years has seriously limited the amount of assistance available to improve the quality of small systems and to expand water service to more marginal rural areas. In addition, as many systems become older there is an increasing need to upkeep and maintain rural water systems in order to protect the enormous investment made by FmHA and local rural communities. On top of this over 3000 FmHA loans will be sold to the private market severing the long-standing FmHA institutional relationship with approximately 2000 rural water systems. Because of this sale, these systems will be without the traditional FmHA field level technical assistance support.

The renewed funding of the FmHA water and sewer grant and loan program and the continuation of the grassroots rural water circuit rider technical assistance program will go a long way in helping resolve these deep concerns. The grant and loan funding is critical, because it is the only viable source of financing available to the majority of non-profit rural water systems. Rural water districts do not have the legal standing to float bonds, levy taxes or seek other types of public financing. Private financing has seldom been an alternative because of its high cost and consistent unavailability. With a repayment rate on water and sewer loans of over 99.6%, this is probably the soundest government loan assistance program in the nation.

In recent testimony by Lee Thomas, the EPA Administrator, the FmHA rural water grant and loan program was cited as the major source of funding assistance to help small rural systems meet SDWA requirements. In response to a House Committee question EPA responded:

> "The Agency has met with the FmHA in an effort to ensure that adequate financial support is and will continue to be available to small water systems to meet additional requirements imposed by the Safe Drinking Water Act."

In effect, we have one federal agency imposing regulatory requirements and counting on another agency (FmHA) to provide funds to support compliance. While we may not like the way this came about, it is the way it is in rural areas and the FmHA grant and loan program is critical to SDWA compliance. The second area of our concern is the assistance available to help improve the operation and maintenance of existing rural water systems. Most rural water systems were developed because neighbors got together and decided that something had to be done about the poor quality or lack of water. These people formed water districts, signed up customers, borrowed funds from the only source available - FmHA - and set up a small water system operation with part-time personnel.

These systems are as varied in their size and structure as rural America itself. Many users are still small 'mom and pop' operations; others have grown from a few hundred households to several thousand while many small towns are having serious operational problems with old and worn out water systems. The common problem among these systems is the need to improve the quality of the water while continuing to provide water in the most cost effective manner possible.

What has evolved from this need is the rural water circuit rider technical assistance program now operating in thirty-three states. A full-time rural circuit rider, working under the oversight of each state rural water association, is available to provide hands-on assistance and guidance to all rural water systems in the state regardless of size or problem. This allowed many rural systems to steadily improve the efficiency of their operation and the quality of the water delivered. Circuit Riders have saved significant amounts of money in preventing water loss, reducing the need for replacement of pipes, pumps and other equipment and in working with systems to set adequate water rates to provide funds for continuous preventive maintenance.

For example, in Kentucky, over the past year, approximately $592,493.00 was saved in water loss in 75 water systems (based on 789,991,460 gallons saved at a conservative estimate of 75 cents per 1,000 gallons). This was the result of an aggressive water leak detection program by the circuit rider which provided on-site guidance to rural water systems - and equipment for them to use - for the purpose of identifying and repairing leaks. This same program has produced similar benefits from New York to Alabama and from Utah to Maine. While this is but one small example of the grassroots effectiveness of the circuit riders, it is typical of the impact that circuit riders are having on improving SDWA compliance, preserving water sources, saving operating costs and strengthening the overall performance of all rural water systems.

Finally, we want to express our concern and offer our help in the sale of the $1.5 billion in FmHA community facility loans. We realize that this was necessary last year in order to meet federal budget deficit reductions targets. Over the past few months we have worked closely with FmHA to help them to establish a loan portfolio program that will be sensitive and helpful to the borrowers affected. Their response has been positive and open and we believe that the program can be carried out with a minimum of confusion. However, we urge you to monitor the sale closely to assure that there is adequate provision for grassroots technical assistance in the servicing of these loans.

Attached to this testimony is a chart describing the number of visits made by the circuit rider in each state and the type of technical assistance provided. There have been visits made to rural water systems throughout the thirty-three states this past year. We invite all of you to come spend some time with a circuit rider when he visits a small rural water system. We believe you will appreciate the value of the direct relationship between the circuit rider and the water system and the success the hands-on approach has in solving small water problems.

One special request we are making is that you consider increasing the funding for the circuit rider program to $2.9 million a year to provide for circuit riders in every state. With the sale of the $1.5 billion in FmHA loans there will be water systems in every state cut off from their existing access to FmHA county, district, and state offices. FmHA in its presentation to Congress on the progress of the program cites the circuit rider program as the alternative to the loss of this FmHA technical assistance contact. With an expanded circuit rider program this type of assistance would be available to rural water systems throughout the country.

In closing, we want to again thank you for your past support of rural water and to urge you to maintain the funding level for the FmHA rural water loan program at the $330 million level and the FmHA grant program at $109 million.

CIRCLE RIDER MONTHLY TOTALS
FISCAL YEAR 1986

STATE ASSOCIATION	Y-T-D TOTAL	Y-T-D OPER.	Y-T-D MAINT.	Y-T-D MNGT.	Y-T-D FINANCE	Y-T-D COMP.
ALABAMA	282	265	11	2	3	1
ARKANSAS	457	151	232	73	1	0
COLORADO	433	194	101	120	2	16
FLORIDA	497	158	85	143	37	74
GEORGIA	441	198	110	126	4	3
IDAHO	54	42	0	9	0	3
ILLINOIS	438	138	178	34	54	34
INDIANA	466	141	91	217	3	14
IOWA	566	531	0	24	6	5
KANSAS	447	181	77	170	11	8
KENTUCKY	443	215	189	27	0	12
LOUISIANA	452	241	32	121	34	24
MAINE *	420	182	141	73	11	13
MINNESOTA	453	198	88	152	3	12
MISSISSIPPI	461	187	38	210	0	26
MISSOURI	428	103	96	228	1	0
MONTANA	460	187	114	148	6	5
NEBRASKA	432	151	109	103	62	7
NEW MEXICO	461	51	262	48	67	33
NEW YORK	428	234	177	11	5	1
NORTH CAROLINA	422	145	188	77	3	9
NORTH DAKOTA	471	163	140	116	27	25
OHIO	468	178	195	35	58	2
OKLAHOMA	448	170	15	260	3	0
OREGON	504	223	157	21	40	63
SOUTH CAROLINA	420	176	91	114	12	27
SOUTH DAKOTA	441	196	104	126	5	10
TENNESSEE	595	106	195	211	7	76
TEXAS #1	427	152	84	182	8	1
TEXAS #2	421	94	73	246	3	5
UTAH **	476	111	184	99	6	76
VERMONT ***	436	207	179	9	27	14
W VIRGINIA	232	208	0	11	0	13
WYOMING	83	18	19	9	5	32
ROVING CR	411	58	38	303	12	0
TOTALS	14774	5953	3793	3858	526	644

Water and Wastewater Equipment Manufacturers Association

STATEMENT OF WILLIAM BIDGOOD, VICE PRESIDENT, UTILITY PRODUCTS FOR BADGER METER, INC., ON BEHALF OF THE WATER AND WASTEWATER EQUIPMENT MANUFACTURERS ASSOCIATION

Senator Burdick. Our next witness is Mr. William Bidgood, vice president, utility products, Badger Meter, Inc., on behalf of the Water and Wastewater Equipment Manufacturers Association, Inc.

Mr. Bidgood. Mr. Chairman, I am William Bidgood, vice president and general manager of utility products for Badger Meter, Inc., and a member of the board of the Water and Wastewater Equipment Manufacturers Association.

I am here today to present testimony on behalf of the association regarding the fiscal year 1988 funding from the Farmers Home Administration water and wastewater disposal program.

Those who benefit from this program are the small rural communities. The program is designed solely to assist small, rural communities which are unable to obtain financing for their water and wastewater needs from other sources.

The program is authorized to provide financial assistance for water and waste treatment facilities in rural areas and towns of up to 10,000 people, with high priority given to public areas smaller than 5,500 people or less.

Let me stress the importance of the mandatory requirements of eligibility for these loans. The only communities eligible are those which cannot obtain the commercial financing for these projects.

What do these projects accomplish?

These projects, supported by the FmHA program, are construction projects for water and wastewater treatment facilities which are basic to the health needs of these small communities. Further, these projects are necessary to allow the economic growth of these rural areas. Businesses will not move to an area without adequate water and wastewater treatment.

The record shows that the program works. The FmHA program is 75 percent loans, and 25 percent grants. This program promotes the health of rural American citizens, and it has demonstrated extraordinary financial responsibility. Since the program's inception in 1937, $9.1 billion in loans have been awarded with a default rate of only .025 percent.

Borrowers must have the legal capacity to repay the loans in order to qualify. This includes pledging security for the amount borrowed. Grants are granted only in those instances where the most critical and dire need exists related to serious health impairment, and it is demonstrated that there is no financial capability to repay the loan.

The requirements of the reauthorized Clean Water Act and Safe Drinking Water Act place additional and necessary burdens of compliance with environmental laws and regulations on these small rural communities.

Congress voted overwhelmingly to override the President's veto of the funding measures associated with EPA's construction grant program under the Clean Water Act. This action, combined with the recent passage of the Safe Drinking Water Act, vividly reflect the very high priority that our government and our citizens place on healthy water.

EPA's construction grant program, over time, will be evolving into a loan program, which requires the communities to take financial responsibility for the projects. The Farmers Home Administration, in large part, took this position from the outset.

The FmHA program has proven over a long time that it can in a confident manner place financial responsibility in the hands of the project beneficiaries and, as such, it is a very cost effective way for the federal government to assist in the achievement of safe water in rural America.

With the additional pressures being placed by the Safe Drinking Water Act, and reauthorized Clean Water Act, and the important policies of EPA, the FmHA program dedicated to only small communities, with no other funding capability, is more critical than ever before in our history.

Given the massive grants program to deal with the big city wastewater problems, we find the administration's request of zero financing for the Farmers Home Administration's water and wastewater program for rural communities to be incomprehensible.

Who is to pick up the slack? Are we to abandon these basic health needs of our rural citizens. We strongly urge you, at a minimum, to maintain the funding for this most deserving FmHA water and wastewater disposal program at $330 million for loans, and $110 million for grants.

We thank you for this opportunity to address the committee, and we ask that you enter our written statement into the record.

Senator BURDICK. Thank you very much for an excellent statement.

[The statement follows:]

STATEMENT OF WILLIAM BIDGOOD

Mr. Chairman and distinguished members of the committee, I am William Bidgood, Vice President of Utility Products for Badger Meter, Inc. and a member of the board of the Water and Wastewater Equipment Manufacturers Association (WWEMA). Our association appreciates the opportunity to appear before this committee today to present our views on fiscal 1988 funding for the Farmers Home Administration's water and waste disposal program.

WWEMA is a 79-year old organization representing corporations that design, manufacture and supply technology for use in the water supply and water pollution control industries. Our plants, in nearly all 50 states, employ well over 50,000 people.

We find the Administration's request for zero financing for the Farmers Home Administration's water and waste disposal program incomprehensible. As public support for clean and safe drinking water increases, the Administration's response and sensitivity to environmental issues is deteriorating. Ending such an excellent and useful program is a prime example. Let us take a brief look at whom the program serves.

The FmHA water and waste disposal program is designed solely to assist small, rural communities which are unable to obtain financing for their water and wastewater needs from other sources.

These needs are basic: constructing, repairing or modifying water supply, treatment and distribution facilities so that when members of these communities turn on their tap, they can rest assured they will have a supply of clean and healthy water to drink — free from dangerous contaminants that could threaten their health.

The needs consist of: constructing, repairing and improving waste collection, treatment and disposal facilities so that these communities know dangerous wastes are being taken care of in an environmentally-sound way and are being treated and disposed of properly — preventing illness and ensuring the environmental integrity of the small rural areas that make this country unique and beautiful.

These needs are also vital to economic growth. Clean and safe water as the "key to life" is no less important to a small community in your state than to a major municipality. Major industries - potential employers - make it clear they require adequate and reliable supplies of water where they choose to locate their businesses. Also, at the top of their list in deciding where to build, expand or relocate are the conditions of an area's sewer and waste disposal facilities.

Small communities should have the right to sound water supply and wastewater treatment systems to compete for economic growth.

The FmHA program helps meet all these needs. The program is authorized to provide financial assistance for water and waste treatment facilities in rural areas and towns of up to 10,000 people, with priority given to public areas smaller than 5,500 people. These are the communities that usually experience exceptional health and safety problems due to deteriorating water supply facilities or inadequate waste facilities. In fact, these needs amount to over $1 billion applications-on-hand for FmHA loan and grant assistance as of March 27, 1987.

Ending this program is saying a resounding "NO" to small towns in this nation — closing the door on their economic growth and disregarding the health of their people.

This is not to say we should be cavalier in our attitude toward government assistance. WWEMA recognizes the need for financial constraint in this period of high deficits. But this worthwhile program is extraordinarily and financially responsible. Consider:

The majority of the program is a loan program. In fact, since the program's inception in 1937, $9.1 billion in loans has been awarded with a default rate of only .025 percent.

Borrowers must have the legal capacity to repay loans. This includes pledging security for the amount borrowed.

Borrowers must construct a financially-sound facility based on taxes, assessments, revenue fees or other satisfactory sources of income. They must maintain an adequate reserve.

The whole FmHA program emphasizes fiscal integrity. Its history demonstrates a proven track record of borrowers fulfilling their obligations. Based on other wasteful government programs, FmHA should be praised for its financial prudence. Yet the Administration's response to those who desperately need this program, and play by its rules, is to say "That's all folks - program's over."

WWEMA urges continued support at current funding levels of $330 million in loans and $110 million in grants as a minimum requirement for small communities to maintain a healthy and productive standard of living. Any further reductions will have a significant negative effect on the economic and community development, along with the environmental quality of rural America. Water supply and treatment capacity is an essential element in achieving each of these goals.

Two other important points needs to be made.

First, the requirements of the reauthorized Clean Water Act and Safe Drinking Water Act place additional and necessary burdens of compliance with environmental laws and regulations on small communities.

Second, the financing available for these other programs is also decreasing.

A prime example of this is the Clean Water Act. This law maintains tight environmental compliance deadlines. It has strict enforcement provisions. It has new programs to protect the environment from toxic "hot spots", dangerous sludge and non-point source pollution — a particular problem for rural areas and the cause associated with the most water quality problems in this country since 1982.

WWEMA fully supports these excellent programs. But the heart of the Act - the EPA construction grants program which provides funds to build wastewater treatment facilities - is being cut in the Administration's proposed 1988 budget. These cuts will cause states to carefully evaluate their "clean water needs" and who will receive funding for treatment plant construction. The past history of the program demonstrates that a large percent of EPA's sewer construction funding is awarded to large, urban communities — with fewer grants going to rural communities.

At the same time, EPA is stepping up its enforcement efforts against all communities and is requiring them - often by legal means - to build treatment plants to meet federal water quality standards regardless of their access to federal funding assistance.

For rural America operating without FmHA assistance, this will be a major problem. This program is, in many cases, the sole instrument and safety net small communities have for construction funding.

The same holds true on the drinking water side. Under the new Safe Drinking Water Act, EPA is substantially increasing its standards-setting activities. Over 80 contaminants will be regulated during a three-year period. Communities must prepare to meet these regulations. Small water systems serving under 10,000 will have to prepare within two years to monitor for an additional group of unregulated contaminants. In addition, EPA is currently developing mandatory filtration and disinfection rules, where within a very short time frame public water systems will be required to comply.

Again, these are excellent environmental goals which WWEMA wholeheartedly supports. But we are concerned how small communities will be able to finance the construction to meet those sound environmental principles. The FmHA program is the safeguard against water quality problems. It is used by rural America to provide its citizens with safe drinking water.

Mr. Chairman, John Deway commenting on the greatness of America once said: "A democracy is more than a form of government; it is primarily a mode of associated living, of community." The FmHA water and waste disposal program illustrates this grand ideal perfectly. It helps provide many communities in rural America with adequate drinking water sources and proper means for waste disposal to ensure that basic human needs are met - regardless of population or financial capability.

We strongly urge you, at a minimum, to maintain the funding level for the FmHA water and waste disposal program at $330 million for loans and $110 million for grants. WWEMA believes that with the Congress, FmHA and industry working together, we will be able to satisfy rural America's future needs of that invaluable commodity - water.

Thank you.

COUNCIL FOR RURAL HOUSING AND DEVELOPMENT

STATEMENT OF CHARLES EDSON, LEGAL COUNSEL

Senator BURDICK. The next witness is Mr. Charles Edson, legal counsel for the Council for Rural Housing and Development.

Mr. EDSON. My name is Charles Edson, and I am counsel to the Council for Rural Housing and Development, a group of over 160 owners, developers, and managers of section 515 projects.

If I may, I would like to submit my testimony for the record, and briefly summarize it.

Senator BURDICK. Without objection.

Mr. EDSON. The first point goes to the fiscal year 1988 appropriations for the section 515 program. The administration, again, requested a zero budgeting for this program budget request. We believe that the program has been extremely worthwhile as we set forth in our testimony, and the committee will note.

We are asking at this time for a freeze at last year's level. This represents a substantial cut from a few years ago, when we had $900 million, and taking inflation into account, we have a 40- to 50-percent cut. But we feel that in an era of budget stringency, it would be unrealistic to ask for an increase, but we are recommending the freeze at the $669 million for loan funds, with $165 million rural residence assistance which is so essential to make the projects affordable for some low-income people.

During this year, a very difficult year for the section 515 program, because of the new tax bill that changed the tax exemption, we have gone from the depreciation base incentive program to the new tax credit.

The tax credit imposes severe targeting requirements on eligible section 515 tenants. Under the tax credit, they have to be at 50 or 60 percent of the median. Thus, the section 515 owners have to find lower income tenants, many of these are having great difficulty making their basic rent on their low income, because their incomes are so low, and 30 percent of that is below the basic rent they need, and they cannot get in the projects without rental assistance.

Over the fiscal year 1987, there is a desperate need for more rental assistance. Obviously, under the budget stringency, the funds have to come from somewhere, and what we are suggesting is that you transfer $115 million of our appropriated funds for section 515, the $669 million, over to the rent supplement account, or the rental assistance account, which would produce 10,000 more rental assistance units, and about 3,400 less 515 units.

We are willing to make that tradeoff because that will make the program work. They were having some difficulty right now because of the adjustments in the tax law. We would be more than pleased to visit with you on an individual basis as we make this serious and worthwhile adjustment. It will have to be in the urgent supplemental for fiscal year 1987.

Finally, as you know, last year's appropriations act contained a moratorium on the prepayment of section 515 loans. Section 515 loans which were made before December 21, 1979, the statute grants the owners free right to prepay the loan, if an owner so chooses. This right was reaffirmed in 1980 by Congress, but last year, because of some concern with prepayment in California, a moratorium was placed in the appropriations act prohibiting Farmers Home from spending any money to accept prepayment on these loans. This was clearly a stopgap measure to allow the authorizing committees the opportunity to handle it.

The moratorium is due to expire on June 30. We believe that the committee will be asked to extend the moratorium until September 30. While we do not oppose that directly, we would have to say that that should be the last extension.

There is much to be dealt with in authorizing legislation in some form or another, and it gets to a point where this mechanism of not using appropriated funds to accept prepayment to Farmers Home seems to be not the proper way to go about it.

So if the committee does choose to grant the extension of the moratorium until September 30, we certainly hope that this will be the final extension, and let's handle it in the authorizing legislation.

Thank you very much, Mr. Chairman, for your attention and interest.

Senator BURDICK. You mention that you hope that the moratorium on section 515 loans will not have to be extended beyond September 30. Do you support the extension to that date?

Mr. EDSON. We do not oppose the extension. We are working closely with the tenant groups to try to find an answer, and it is only fair that they have more time, and we probably will not have an authorizing bill before that time.

Senator BURDICK. Will the tenants' rights be protected by the regulations?

Mr. Edson. We think that FmHA regulations go a long way toward protecting tenants' rights. There is a 6-month notice period, and we hope that the legislation will provide alternative housing or else a buyout to the owner at fair market value. One way or the other, the housing will be there, so the tenants will be protected. Believe me, we want to protect the tenants as much as anyone, but we also have to honor the contractual rights.

Senator BURDICK. Thank you very much.

[The statement follows:]

STATEMENT OF CHARLES L. EDSON

Mr. Chairman and members of the Subcommittee, my name is Charles L. Edson of Lane and Edson, P. C., Washington, D. C. I am pleased to appear before you today in my capacity as Counsel to the Council for Rural Housing and Development. I appreciate the opportunity to address you on the most important topic of housing for rural America.

The Council for Rural Housing and Development is a national association of over 160 members, including eleven state associations, actively involved in the Section 515 rural rental housing program. Since its formation in 1980, the Council has been active in the legislative process and has worked closely with the Farmers Home Administration in the regulatory area to help protect and improve the Section 515 program. I think FmHA would agree that the close working relationship we have developed is one of mutual benefit.

Rural Housing Need

In the past years, CRHD has appeared before you and reported on the dire housing shortage and poverty of rural America. This year is no different. The great need for housing in rural America continues. The Section 515 program performs a vital function by filling a desparate need for decent, safe and affordable housing. In the FmHA service area there are over two million occupied housing units that are "substandard", meaning they lack adequate plumbing and/or are overcrowded. 850,000 households with incomes below the poverty line live in such housing. According to FmHA, in February 1986, the average income for a resident in a Section 515 project was $8,050. The average income for the very low income tenants was $5,969.

Although housing needs are the greatest in rural America, the supply of credit to meet those needs is simply not there. Over 550 rural counties do not have federally chartered savings and loans. Rural banks' per capita assets average only $3,400, less than half of the $7,000 per capita average in urban areas. Section 515 loans are made only after it has been proven that conventional financing is not available.

Section 515 Activity

It is this mismatch of high need and low resources that impelled Congress to create the Section 515 program. Since its inception in 1963, the program has provided over 385,000 units of rental housing, serving over 800,000 elderly and low income citizens. The program has been tremendously cost efficient and has an excellent track record. In 1986, the average cost per unit was approximately $33,000, well under the average cost for new rental units. The Section 515 program is not a grant program; every loan is secured by a mortgage on the assisted housing and will be repaid. Defaults are less than 1%, a record unmatched by any other federal housing program.

The Section 515 program often presents the only hope for many rural Americans in dire need of housing. However, the program does more than just provide shelter. Section 515 results in good community development. The concentration of people in rental units can mean less federal, state and local tax dollars spent on street and road construction and maintenance, sewer and water construction as well as public school transportation, and less farm land being diverted to subdivision construction. Often, the location of a Section 515 project in a community has helped attract new industry by providing housing for potential employees. Money spent on Section 515 creates a community asset that lasts for many years as opposed to one shot assistance under most social service programs. In addition, every FmHA financed unit creates 1.3 person years and employment and brings much needed job opportunities to rural areas.

The Future of Rural Housing

In FY87, Congress appropriated $669.9 million for the Section 515 program. This figure is down from the $900 plus million made available to FmHA just 5 short years ago. Taking inflation into account, this represents a cut in units from over 30,000 to under 20,000.

The Administration's FY88 budget proposal would replace all current rural housing programs, including the rental assistance program, with a 20,000 voucher system. An additional 1200 vouchers would be provided for tenants displaced by prepayment. Given the large number of needy rural Americans, 20,000 vouchers would be woefully inadequate. In addition, the extant housing stock is simply not available to house all rural Americans with vouchers. A voucher program to supplement the new construction program would be ideal; alone, however, it cannot adequately serve the need for rural housing.

Although we would obviously like restoration of the funding that has been taken away during the last five years of budget stringency, we do not make such a request in the face of the continued necessary efforts to eliminate the budget deficit. However, in view of the deep cuts that this program has already suffered, we urge you to again support funding of the Section 515 program in FY88 at the FY87 level of $669.9 million.

Prepayment

On another important matter which has been brought before the Committee, we understand that the moratorium on prepayment of Section 515 loans was recently extended as part of the urgent supplemental appropriations bill. We hope there will not be a reason to extend the moratorium beyond the new September 30 date.

CRHD has been working very closely with our good friends at the Housing Assistance Council and the National Rural Housing Coalition to come up with a solution to this problem that not only protects tenants from possible displacement but also protects the owners' contractual rights to prepayment. We would support with proper modification legislation that was introduced by Housing Subcommittee Chairman Henry Gonzales, H. R. 1070. The Farmers Home Administration plans to issue final regulations protecting the tenants' interests by June 30. All groups involved are taking an active role in resolving the problem; extending the moratorium beyond September 30 could mean unnecessary delays in reaching the proper legislative solution.

Thank you. I would be happy to answer any of your questions.

NATIONAL UTILITY CONTRACTORS ASSOCIATION

STATEMENT OF VIC DiGERONIMO, PRESIDENT

ACCOMPANIED BY MR. McDERMITT

Senator BURDICK. Our next witness is Mr. Vic DiGeronimo, president of the National Utility Contractors Association.

Mr. DIGERONIMO. Mr. Chairman and members of the committee, as president of the National Utility Contractors Association, I represent 1,700 companies nationwide that specialize in the construction of water supply and wastewater treatment projects.

Because many of the systems built by NUCA members are financed by the Farmers Home Administration water and wastewater program, I will take this opportunity to briefly offer the construction industry's views on the program.

For several years, the Reagan administration has urged the Congress to terminate all federal funding for this program. Fortunately, under your leadership, Chairman Burdick, and this committee, the water and wastewater disposal program is still being funded at the level of $441 million annually. Had it not been for the work of this subcommittee, and your House counterparts, this program would have been ended.

As you heard in previous testimony, Mr. Chairman, we are asking for a repeat performance for fiscal year 1988. Quite simply, a minimum of $441 million in appropriation which is necessary if the program is to remain an effective one.

Obviously, our industry has a vested interest in the funding of the program. There can be no doubt that this financing is absolutely vital to the nation, and water delivery and wastewater treatment systems account for a large share of these projected construction needs.

In fact, a highly respected study by the Congressional Joint Economic Committee estimates nearly $200 billion must be spent on these two areas of construction by the year 2000. Similar studies by the Environmental Protection Agency and other groups support these figures.

The two major federal programs that finance this work are EPA and Farmers Home. Despite the importance of these programs, the Reagan administration's fiscal year 1988 budget request for these programs represent a staggering 55 percent reduction from the original appropriation as recently as 1980. Specifically, the reduction has been $4.4 million in fiscal year 1980 to a proposed 1988 request of only $2 million, which was included in the President's budget for those accounts.

As you well know, the administration is planning to completely eliminate all federal funding for the FmHA grant and loan program.

It is also important to keep in mind that the Farmers Home program used to be funded at nearly $1 billion annually in the late seventies. Given the more than 50 percent drop in funding levels, we feel strongly that this program has already been pared to the bone.

The construction needs for water and sewer systems as of March 23 of this year, just 2 weeks ago, the number of applications for FmHA loans numbered 1,744, totaling just over $1 billion. The need for this funding, and its importance to rural communities can be categorized, environmental and economic.

Although the EPA construction grant program makes more than $2 billion in grants annually for sewer projects, only a small percentage is directed toward smaller rural communities. At the same time, however, EPA is stepping up its enforcement policy against all communities and requiring them to build the systems necessary to meet federal water quality standards, regardless of whether or not government funds are available.

Sewerage treatment facilities are also necessary in many rural areas to replace septic tanks that have often proven to be the source of contamination of drinking water.

We must all realize that sound water quality is essential for local growth. It has been the experience of many that business is vitally needed to provide an infusion of capital and jobs.

In summary, Mr. Chairman, it is clear from my testimony that rural communities still have a huge and urgent need for water facility construction financing. This program is important, it is efficient and, above all, it is working.

I strongly urge you to continue your support for adequate funding for this program in fiscal year 1988 and beyond. Thank you for granting me this opportunity to appear before you here today. My colleague, Mr. McDermitt, and I will be happy to answer your questions.

Senator BURDICK. Has the Farmers Home been using the money that has been given for that purpose, all of it?

Mr. McDERMITT. It is my understanding that it is so.

Senator BURDICK. They have no carryover?

Mr. McDERMITT. In the past few fiscal years, to the best of my knowledge, they have used every dollar they have had.

Senator BURDICK. Thank you very much.

[The statement follows:]

STATEMENT OF VIC DIGERONIMO

Mr. Chairman and members of the Committee, the National Utility Contractors Association (NUCA) is comprised of 1,700 contractors, suppliers and manufacturers nationwide that specialize in the construction of water supply and wastewater treatment projects. Many of the water and sewer systems built by our members are financed through the Farmers Home Administration (FmHA) Water & Waste Disposal grant and loan program.

As a result of our work in constructing the facilities financed by this important program, I will take this opportunity to offer the construction industry's views on the program and its effectiveness.

I begin by expressing the industry's staunch opposition to President Reagan's plan to terminate funding for the Water and Waste Disposal Program in fiscal 1988.

Our nation has been alerted over recent years to the crumbling condition of our infrastructure. Studies indicate that spending for our system of public works must be significantly increased at all levels of government just to keep pace with current needs. Water delivery and wastewater treatment systems account for a large share of these projected construction needs. In fact, a highly respected study by the Congressional Joint Economic Committee estimates nearly $200 billion must be spent on these two areas of construction by the year 2000. Similar studies by the Environmental Protection Agency (EPA) and other groups support these figures.

Reduced Federal Funding

Two federal programs, the EPA Construction Grants Program and the FmHA Water & Waste Disposal Program, represent the federal government's major source of financing for the nation's low income rural communities' water and sewage treatment construction needs. An analysis of the federal budget reveals that the Reagan Administration's fiscal 1988 budget request for these two programs represents a staggering 55 percent reduction from Congressional appropriations for these same programs in fiscal 1980. Specifically, the reduction is from a figure of $4.4 billion in 1980 to the proposed 1988 total of $2 billion in the President's budget request for these programs. The Administration would finance only the EPA program and completely eliminate funding for the Farmers Home construction program. A breakdown of these figures follows:

Program	FY 80 Funding	FY 88 Request	Decrease
FmHA Water/Waste	$990 million	-0-	$990 million
EPA Construction Grants	3.4 billion	$2 billion	$1.4 billion
TOTAL	**$4.39 billion**	**$2 billion**	**$2.39 billion**

Obviously, the $455 million appropriated for this Farmers Home program in fiscal 1987 represents a 50 percent drop in funding since fiscal 1980. FmHA statistics also reveal that the total number of communities that received grants and/or loans during the last completed fiscal year, 1986, has been reduced significantly since 1980. In summary, we feel that funding for the program has already been pared to the bone and that further reductions are not possible if the program is to remain viable.

In addition to a reduced pool of federal funds for water and sewer projects, it is important to note that the federal tax reform proposal enacted by Congress last year is likely to exacerbate the problem facing rural communities by further limiting their ability to finance construction work through local resources. Restrictions on the use of municipal development bonds and other provisions that are part of the tax package are expected to further hinder the opportunity for local communities to finance construction.

Perhaps the truest indicator of the continued need for this FmHA program is the number of preapplication and applications pending with the Farmers Home Administration. As of March 23, 1987, a total of 1,744 applications and preapplications for FmHA grants and/or loans totaling $1.001 billion are now pending at Farmers Home headquarters. The number of pending applications is slightly higher than at this time last year (a total of 99 more), while the total dollar amount has risen some $48 million during this time.

These figures clearly indicate that, despite the $455 million appropriated by Congress for fiscal 1987, rural communities still have an acute and urgent need for water and sewer system construction financing. The Farmers Home program is often the financing source of last resort for a number of poorer communities.

Economic Growth & Public Health

Funding for this program must be viewed in budgetary terms not as a liability, but as a long-term asset because it represents an investment in the future economic growth of the nation's underdeveloped areas. A sound network of water delivery and sewage treatment facilities is essential to the economic growth of these rural areas. Studies indicate businesses and industries place the condition of an area's sewer and water system near the top of their list of criteria in determining whether to build, expand or relocate.

Perhaps the most alarming statistic estimates that nearly half of this nation's communities are unable to add additional businesses and residences onto their sewage treatment systems because they are already operating at "full" capacity. Many municipalities have been placed under court-ordered "sewer bans," which means they are unable to build new homes and businesses in their jurisdictions. It has been the experience of many of our member companies located in rural areas that vitally needed businesses that could provide an infusion of capital and employment into the local economy locate elsewhere due, at least in part, to inadequate water and sewer facilities.

Adequate funding for this FmHA program is also necessary to meet the needs of the public health. Due to inadequate funding to finance pipeline and treatment construction, many rural communities rely on septic tanks for sewage disposal and underground wells for water. Currently, tens of millions of Americans are without sewer service. In fact, the most recent EPA "Needs Survey" submitted to Congress in February of this year estimates that more than 12 percent of our population nationwide is served by sewage treatment systems that offer less than "secondary" treatment (a biological process used to remove water pollutants).

The alternative is largely the use of septic tanks. When operated and maintained properly by owners living on suitable soil, septic tanks can provide a cheap and efficient method of waste disposal. However, studies indicate that at any one time, 20 to 60 percent of the septic tanks in the United States are malfunctioning.

More importantly, malfunctioning tanks are a major source of both groundwater and surface water pollution. The National League of Cities, in previous testimony before Congress, noted that the use of septic tanks can lead to groundwater pollution, local and regional public health problems and contamination of water supplies.

Water Pollution Control

Over the years, the FmHA Water & Waste Disposal Program has also proven to be an important source of financing wastewater treatment construction needs mandated by the federal Clean Water Act. Farmers Home officials report that a significant percentage of the program's funding is used to assist poor communities in financing the 45 percent local share required to receive an EPA grant under the EPA Construction Grants Program. Any reduction in FmHA funding would surely result in a slowdown in our nation's water pollution abatement effort.

It is also important to know that an increasing percentage of EPA sewer construction funding is now awarded to largely urban communities for treatment plant construction. Only a small percentage is now being used to construct sewer pipeline systems, such as collector pipelines. This policy penalizes small rural communities because pipeline costs represent 80 percent of the total project cost in small municipalities. In high density urban areas, however, pipeline construction accounts for only 15 to 20 percent of treatment system costs.

As a result, fewer EPA construction grants are going to rural communities. At the same time, however, EPA is stepping up its enforcement policy against all communities and is requiring them -- often by using court orders and other administrative powers -- to build the sewage treatment systems necessary to meet federal water quality standards. In essence, the agency is saying to communities, "You must construct these facilities. How you pay for them is your problem." The FmHA program is often the safety net for these communities with no other available source of construction financing.

Conclusion

Mr. Chairman and members of the committee, I conclude by imploring you to appropriate an adequate amount of funding in fiscal 1988 for the Farmers Home Administration's Water & Waste Disposal program. A funding level of $455 million, equal to that of recent years, is certainly reasonable and responsible in light of the current need for this construction financing and the benefits derived from it.

Under the outstanding administration of the program by John Bowles, Acting Deputy Assistant Administrator for Community and Business Programs, and James Schwartz, Director of the Water and Waste Disposal Division, the program has efficiently and expeditiously made the grants and loans necessary to build these vitally-needed projects. The low loan delinquency rate of about 2 percent is just one indication of the effective administration of this program.

As any responsible business group, the National Utility Contractors Association supports a balanced federal budget. But given the figures cited earlier in my testimony, which indicated a proposed 55 percent reduction in federal funding for water supply and sewer construction programs, we feel strongly that the construction area of the federal budget has already done more than its share in reducing federal spending. Further reductions will not reduce the need for this financing, it will only postpone construction and result in even greater costs and higher prices in future years.

This program is important, it is efficient and, above all, it is working. I strongly urge you to continue your past support for adequate funding for this program in fiscal 1988 and beyond. Thank you for granting me the opportunity to appear before you here today, and my colleague, Mr. McDermitt, and I will be happy to answer any questions you may have at this time.

NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

STATEMENT OF DR. ROALD LUND, DEAN OF AGRICULTURE, CHAIRMAN, BUDGET COMMITTEE, NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

ACCOMPANIED BY:

DR. LUCINDA NOBLE, DIRECTOR OF EXTENSION, CORNELL UNIVERSITY

DR. CHARLES KRUEGER, DIRECTOR, AGRICULTURAL EXTENSION STATION, PENNSYLVANIA STATE UNIVERSITY

DR. ALLEN GOECKER, ASSISTANT DEAN OF AGRICULTURE, PURDUE UNIVERSITY

DR. DAVID THORUD, DEAN, COLLEGE OF FOREST RESOURCES, UNIVERSITY OF WASHINGTON

DR. HAROLD BENSON, EXTENSION ADMINISTRATOR, KENTUCKY STATE UNIVERSITY

Senator BURDICK. Next we will have a panel composed of Dr. Roald Lund, dean of the College of Agriculture and chairman of the Budget Committee of the National Association of State Universities and Land-Grant Colleges; Dr. Lucinda Noble, director of extension, Cornell University; Dr. Charles Krueger, director, Agricultural Experiment Station, Pennsylvania State University; Dr. Allen Goecker, assistant dean of agriculture, Purdue University; Dr. David Thorud, dean of the College of Forest Resources, University of Washington; and Dr. Harold Benson, extension administrator, Kentucky State University.

Welcome to the committee. You may proceed in any order you wish.

Dr. LUND. Mr. Chairman, it is really a pleasure and an honor to appear before you, as members of faculty and staff to make this presentation on behalf of the fiscal year 1988 Budget Committee of the National Association of State Universities and Land-Grant Colleges.

As you have already indicated, we have a committee, you have introduced them, and they are here. I plan to make only a few brief remarks on our overall statement, which you have in your hands or in your office of the fiscal 1988 Budget Committee. It represents the collective thoughts of three of the major policy groups in the land-grant system. In addition, we have Dr. David Thorud who will comment on the forest resources, and Dr. Harold Benson to comment on the 1990 Extension.

I would like to make our remarks short and responsive to your questions. Basically we have, I think, five critical issues that are important to agriculture: Agricultural competitiveness and profitability; water quality and management; food, nutrition, and health; scientific and professional expertise; and rural revitalization.

These are the five issues that our committee would like to bring before you today in responding to your questions. We feel that these are some substantial items that are needed in the budget.

You will hear us comment on the base funding for Hatch, the 1890 research, the animal health, and the Smith-Lever. These formula funds are the core, shall we say, of the research, extension, and teaching programs of the United States.

We are going to comment to you on specific and important areas of agriculture competitiveness and profitability. We would specifically ask that you enhance the competitive grants program, and also make special extension programs for about $30 million.

As a committee, we believe that one of the most important issues facing the United States now and in the future is water quality and management. We are urging the committee to support a $40 million initiative to do special research and also a special extension program. Our committee is 100 percent behind this major request.

Food, nutrition, and health is another area where we ask for restoration of EFNEP, a special initiative of $30 million. We are also requesting an additional $1 million in the competitive research grants in the area of food, nutrition, and health.

Obviously, an important program for all of us is revitalization of rural America. We are asking for targeted rural revitalization particularly in the area of the extension programs of the nation in the amount of $15 million.

Finally, and perhaps most important of all as we look ahead to the future, it has to do with scientific and professional education, the development of the minds of young men and women of this nation for the future. The shortage of education capital is real. We are looking forward to support for an $8 million for graduate fellowships, and a $10 million initiative of challenge grants for participating universities.

Mr. Benson will comment on the 1890 Extension facilities. With this, I would urge you and members of your staff to ask any questions that you might have at this time.

Senator BURDICK. Do any of the other members of the panel have any comments that they would like to make?

After going through your testimony, you indicated that there is very little room for making budgetary savings. These are tough questions. How do you propose we are going to come up with the money? We still have Gramm-Rudman.

Mr. LUND. We have made our contributions to Mr. Gramm, and Mr. Rudman. All of us have. It is just a matter of priorities, Mr. Chairman. I think that research and extension programs rank high as a priority in this nation.

We have our priorities internally. Dr. Krueger will comment on the research impact.

Dr. KRUEGER. Mr. Chairman, I think that one of the things that we feel very strongly about is that the Agricultural Experiment Station is made up of some 12,500 scientists and 13,000 graduate students, and about 7,200 technicians. This is a very capable, unique base on which to build a research program, and we think that we can solve many of the issues that are facing this nation.

I think that the research system in the Agricultural Experiment Station has been fortunate over the last several years in developing a very organized agenda in which we have looked ahead and analyzed where we are going. I think that the recommendations that are in the research portion, followed very closely by extension teaching, are consistent with the Joint Council on Food and Agricultural Science's recommendations for fiscal year 1988.

They have listed a number of priorities that they feel are important and need to be addressed. We have developed a budget from the research standpoint, the extension and teaching that essentially addresses these priority issues. So from my standpoint, on the research phase, I think that we have a lot of talent that we need to take advantage of with appropriate funding, so that we can really address these issues and make them work better, and make agriculture and forestry more profitable.

Senator BURDICK. Do you have any further comments or suggestions?

Dr. LUND. I think that what is important is that we, as a committee here, are presenting to you a united front in the area of research, teaching, and extension. We have gone to great length to present to you as clearly and as concisely as as we know what are the research needs.

Senator BURDICK. Senator Bumpers.

Senator BUMPERS. Mr. Chairman, I don't know, one never quite knows, I don't particularly blame the President for the messed up priorities, those that are stated by OMB and other people. But it is an interesting thing how everybody around here, as usual, is talking about competitiveness in the industrial world, electronics, and so on.

I will bet that there are 100 bills pending in the Senate right now, most of them carry a money tag, to make us more competitive against the Japanese. This is where all the cameras are focused, and this is what this responds to.

In my opinion, the fact that we are able to produce so much more food than we can sell properly, people just assume, either consciously or unconsciously, that we don't need research, we don't need to become more productive or competitive in the world in exporting food.

One of these days we will wake up and find ourselves even more noncompetitive than we are right now. We have been sort of the breadbasket of the world because of these programs that they are talking about.

I will tell you a second thing that is coming at us, you are going to see the Defense Department, and some of the other bloated agencies around here that get all they want and much more than they need—you are going to see agriculture and the farmers, for example, begin to turn somewhat against the Defense Department, and that doesn't serve anybody's purposes in this country.

But I can tell you that the people in higher education, elementary and secondary education, in agriculture, and all those areas of our economy where the people are really hurting, Medicaid, health care, and those kinds of things, you are going to start seeing them turn against the Defense Department because they will see them as the culprit. They are taking a disproportionate share of the money while some of these very legitimate needs that determine what kind of quality of life we are going to have, and how we feel about each other, and about our children and all of this.

As you correctly point out, it is a question of priorities, and the priorities have been so skewed. I have sat and watched it for the last 6 years. I think that it is going to swing back a little bit. I think that the Extension Service, for example, will do very well, as well as a whole host of other services.

As you can see, I have a whole speech on this subject, but I will not take any more of your time. Thank you, Mr. Chairman.

Dr. KRUEGER. One of the major areas that the Extension Service will address itself to in the coming year is this thing called profitability in agriculture, and the research that is being done today and the last recent years has proved to be cost efficient.

I think that we did have a philosophy that the United States was going to feed the world. We suddenly discovered that we had a world market, rather than a domestic market, and we simply were not competitive any more as far as the cost of producing grain.

We were very, very efficient producers, but we were not efficient in cost containment. You can make a lot of money in farming if you hold down the cost, it is just as good as adding bushels per acre. You simply make more money per bushel by reducing your costs.

Senator BURDICK. Any further comments?

Dr. NOBLE. I would support what has been said.

Senator BUMPERS. On childhood diseases, I gave my wife, Betty, $50,000 in emergency funds, and she utilized every public and private organization she could find, the State Health Department, the National Guard, to the Extension Service, and it was the Extension Service that really led everybody else and helped her getting those mothers and those children to the clinics. I know those people and I know what they do. Betty always goes to the Extension Service because they were really wonderful.

Dr. NOBLE. Thank you.

Dr. LUND. Mr. Chairman, I would like to ask David Thorud to make a comment on the forestry research investment.

Dr. THORUD. Four years ago, in 1984, this committee recommended the establishment of a national graduate forestry program to help address the shortages that are certainly more serious today than then in regard to capital for support of agricultural science and education system for agribusiness and agriculture in general.

The committee recommended the establishment of that program with $10 million in 1984. This money certainly established a precedent for grooming forestry people to serve our system.

It might be interesting to note that there are three numbers that characterize human resources in American agriculture today. The average graduate examination score for doctoral degree in agriculture today is 969. The average direct examination score for people who are pursuing a doctoral program in all fields of study in the United States is

1,023. That number has been going up, while the other has been going down. I compliment you on your foresight on raising the quality of people, but we have to address the quality of the programs in our educational institutions.

Let me just comment that the community is willing to match dollar for dollar any congressional appropriation to improve the quality of the higher education at both the postgraduate and undergraduate level to make us more competitive to extract the potential benefits from biotechnology.

Senator BURDICK. Does anyone else want to make a comment or suggestion.

Dr. THORUD. Mr. Chairman, I would appreciate that opportunity. I am David Thorud, and I am the dean of the College of Forest Resources at the University of Washington, but I am here today in my capacity as president of the National Association of Professional Forestry Schools and Colleges.

We have a special situation for the forestry component of the agricultural research community, because of the McIntire-Stennis Act, which was signed into law by President Kennedy on October 10, 1962. Over the past 25 years, it has been an enormously productive forestry research program, lots of problems have been solved, and lots of writings on forestry research have been produced.

The program has also attracted a lot of nonfederal funding for forestry research. In fact, the nonfederal funding is approximately four times the McIntire-Stennis appropriation.

What I am alluding to here is that since the act was signed into law in 1962, our office here in Washington, DC, in conjunction with USDA, is celebrating the anniversary of the McIntire-Stennis program. The celebration, appropriately, pays tribute to Senator Stennis and Congressman Clifford McIntire, who have been the force of the program. These documents that were produced as a result of these events are either in your office right now or on their way.

This provided, I think, an important opportunity to assess where the McIntire-Stennis program is, and where it needs to go. This review indicated that although the program was successful by any measure, it has not yet lived up to its original expectations in terms of funding support.

The original legislation authorized a funding level at 50 percent of the U.S. Forest Service expenditures for research. The McIntire-Stennis funding level at the present time is 11 percent of that total, so there is quite a disparity there in terms of the authorization level. It is also true of other agricultural research programs.

There has been an erosion in terms of the purchasing power cf the McIntire-Stennis appropriation. In fact, since 1978, in constant dollars, the decline in purchasing power has been about 25 percent.

We are not going to look at past critical or mortal life, but what we want to do is focus on the future with hope and aspiration.

So on the occasion of the silver anniversary of the McIntire-Stennis program, the proposal that has been put forth is that you fund at $25 million for the beginning of fiscal year 1988. With the $25 million level, although short of the original authorization, we would be able to have the nation's forestry school significantly address many of the same kind of challenging issues that are facing American agriculture.

Many of the problems are similar—revitalization of rural communities in forested areas, international competitiveness, new market development for forest products, and profitability of forestry. Soil and water conservation issues are also very important in terms of water quality concerns, applications of biotechnological breakthroughs in forestry sources, conservation and enhancement of wildlife, fisheries and recreation.

As it has been discussed here, it is also extremely crucial that we continue to draw the best help because the competition is very steep.

So I really do appreciate the chance to make some comments about this special occasion for us and forestry research, and I will be happy to respond to your questions.

Dr. LUND. Let me ask Dr. Benson to make a few comments.

Dr. BENSON. Mr. Chairman and members of the committee, I am honored to have the opportunity to echo the sentiments of my colleagues, because I am a team member, and I believe in team play.

My particular interest this morning will be on the Extension Program at the historically land-grant institutions. My remarks will be limited to two areas. No. 1, appropriations for the 1890 Extension programs and operations, the appropriation for the operation of the facilities at these institutions.

For the record, I would like to state that the major funding for these institutions is provided by Congress, and in some cases no assistance is provided by the state and local governments.

I submitted, for the record, a written statement in which I solicit your cooperation and support in addressing these two issues.

Thank you.

Dr. LUND. Mr. Chairman, and members of the committee, we would like to come back to one major issue, which we really think is important, and that is water quality management. I would ask Dr. Charles Krueger to comment on this.

Mr. KRUEGER. Mr. Chairman, we have requested in the fiscal year 1988 budget a new $25 million initiative for research, and a complementary extension initiative of $15 million in the area of water quality management. This is apart from the clean water appropriation recently passed. We think that this is a good thrust in the research and education process.

We think that a lot needs to be learned about the prevention and the sources of control of pollution. More importantly, what happens when you put these on. I think that we have seen things happen to ground water that we never expected or ever anticipated. I consider this a national crisis. I think that we need to have research done in this area to be able to arrest contamination that already exists, and to prevent contamination that possibly could occur in the future. We need to look at risk assessments.

This is a joint research and Extension initiative that parallels closely the very fine priority areas identified by the Joint Council on Food and Agricultural Science. This $25 million research initiative, coupled with the Extension initiative, which is involved in the transfer of this technology to the users so that they can implement new techniques, new management direction. We think that this needs to be initiated in fiscal year 1988.

Senator BUMPERS. Let me ask you a couple of questions on that. How much money is in that fund this year?

Mr. KRUEGER. There is no money in the fund this year. There is obviously research being done by the Agricultural Experiment Station scientists as a part of formula funds, or basic funding that we receive and state funding that is provided, and industry funding to some extent.

What we think is really needed is a self-initiated program at the federal level, on a competitive basis. We ask that this be provided on a competitive basis. The point is that this initiative needs to be addressed now. The information that we receive from the monitoring aspects that are going on is alarming in terms of the contamination that exists in this nation's water supplies, and the potential that exists, especially in ground water.

Senator BUMPERS. Who would administer such a fund? Would it be EPA or Soil Conservation?

Dr. KRUEGER. This would be going through USDA, and the Cooperative State Research Service. It is a special grant initiative or a competitive grant initiative, and the proposals would be submitted on the basis of the requests from the very best scientists to address these problems.

Senator BUMPERS. I agree with you. The thing that bothers me is where are we going to find the funds. EPA has the primary responsibility for making sure that we don't contaminate. You are talking about a program that would do a study on the status of the ground water supplies.

Dr. KRUEGER. No; we have a number of programs that are looking at monitoring. I think what we need are some very fundamental answers of when you apply pesticides and chemicals, which we are certainly trying to reduce. But they are a necessary part of agricultural and forestry production, and we need to know what is happening.

This is very basic and fundamental research that is not being conducted by the other agencies. The educational component, through Extension, is vitally needed, and we are working very closely with such agencies as EPA, the Soil Conservation Service, and the Agricultural Research Service, which is a very important part of this picture as well.

Dr. LUND. Nearly 100 years ago, the federal government took the leadership in working in the agricultural research. We are asking in the second century of agricultural research that the federal government step forward again.

Dr. KRUEGER. In my opinion, this is really trying to look ahead. I think that it is so important that we try to get ahead and get some answers. We are saying right now that this is reaching a crisis, and we need to be doing the research that will give us this new knowledge. It doesn't occur, as you well appreciate, overnight, and we need to be ahead, investing and setting priorities that water quality is, indeed, a critical issue for this nation. It underpins a lot of our competitiveness as you look at the food industry, and the society that depends on the quality of our water supplies.

We are essentially requesting something to be ahead of the game, and address this in a major way, before it becomes an unmanageable situation.

Senator BURDICK. Thank you all. You made a good contribution today. I am sure you will find the committee very sympathetic, but the question is where do we get the money. We will give a little less to the military, a little less in foreign aid, and we will probably find room. There is no question of the value of the program.

[The statements follow:]

STATEMENT OF ROALD LUND

Mr. Chairman, and members of the subcommittee. It is an honor to appear before you today to address the critical national issues for agricultural science and education.

I am Roald Lund, Dean of Agriculture at North Dakota State University and chairman of the FY 88 Budget Committee of the Division of Agriculture of the National Association of State Universities. I am pleased to note that several members of our committee are with me today. These people are the experts and will respond to any specific questions about programs.

American agriculture functions in a dynamic world economy increasingly characterized by fierce competition in global commercial markets. Consequently, a "new agriculture" -- based upon higher levels of efficiency, responsible management, and improved resource use--is needed.

Two questions facing the United States are: How do we capture and implement the productive capacity of educators, scientists, and institutions--now in place--to provide for the "new agriculture"? And how can that capacity be enhanced to serve the nation into the next century?

Restoration of the basic capacity of our science and education system is imperative. Federal budget reductions and loss of purchasing power over the past few years must be addressed.

Further, we believe that there are five critical national issues that must have enhanced support:

-Agricultural Competitiveness and Profitability.

-Water Quality and Management.

-Food, Nutrition, and Health.

-Scientific and Professional Expertise.

-Rural Revitalization.

"Research and education today will provide the answers for tomorrow's problems" is a truism commonly voiced, heard, and believed. Development and delivery of such needed knowledge by the land-grant system is mandated by Congress in the Morrill, Hatch, and Smith-Lever Acts. These legislative milestones established and directed the land-grant system to conduct research, extension, and teaching programs to:

-Promote efficient production and utilization of the products of the soil.

-Promote the health and welfare of the American people.

-Contribute to sound and prosperous agriculture and viable rural life.

-Disseminate useful and practical information.

-Make the maximum contribution possible to maintaining national employment and productivity.

However, to fulfill these mandates we must have the resources, the minds, and the flexibility to perform. It is in recognition of this responsibility that the Division of Agriculture, of the National Associations of State Universities and Land-Grant Colleges (NASULGC), offers the recommendations for FY 88 Agricultural Science and Education Appropriations that are detailed in Tables 1 & 2. A more complete discussion of these recommendations is in the document Fiscal 1988 Budget Recommendations to Address Critical National Issues in Food Agriculture and Natural Resources, which has been given to the subcommittee as a resource document.

Our recommendations are intended to restore the capacity of the overall system and to address critical national issues. The capacity of the systems is threatened by the decline in real support over the past decade. In the case of experiment stations, real support today is 16 percent below 1978 while base funding for extension is down 3 percent in real terms. These funds provide for the basic capacity upon which all other activities are based. We believe it is imperative to restore this capacity. Specifically we request the following base adjustments:

To the administrations budget

Hatch	+$18,247,000
1890 Research	+2,747,000
Animal Health Research(1433)	+6,400,000
Smith-Lever(b+c)	+3,890,000

Further, we recommend the restoration of $24,941,000 for the national special research grant programs and restoration of $77,606,000 of the Smith-Lever 3-d programs.

To address the issue of agricultural competitiveness and profitability, we specially recommend enhancement of the competitive grants programs for biotechnology (+$5,984,000), plant science (+$4,516,000) and animal science (+$3,000,000) and the funding of a special extension program in this area at $30,000,000.

Water Quality and Management is a critical national issue that demands immediate attention. We strongly urge the inclusion of increased research funds of $25,000,000 and a special Extension program at $15,000,000 for water quality and management research and education.

Food, Nutrition and health relationships are increasingly critical questions for our population in general and for the food and agricultural system. We recommend the restoration of EFNEP as noted above. However, the general population is In need of balanced, objective information about nutrition, health and fitness. We request a special initiative of $30 million to address this National need. To help build the basic information base in nutrition we are requesting an additional one million dollars in the competitive research grants area.

Revitalizing rural America is a national imperative. A fourth of the nations population -- 63,000,000 people -- live in rural America where the economic, and social challenges of change are often much greater than in urban areas. To help rural America cope and develop we request that a $15 million targeted, rural revitalization program be added to the extension program.

Scientific and Professional expertise development is the seed capital for future vitality. We recommend increased funding of $8 million for graduate fellowships and a $10 million initiative of challenge grants -- a program that would be a public/private joint venture.

I wish to draw the subcommittees attention to two additional items --

the $10 million 1890 extension facilities item and the proposed $25 million funding level for McIntire-Stennis is forestry research.

First the request for 1890 Extension facilities funds were postponed last year until the completion of the 1890 research facilities program. So this is really a request for level funding. This is the 25 anniversary of hte McIntire-Stennis Bill. Dr. David Thorud will address this in a moment but we strongly urge the subcommittee sieze this opportunity to provide funding for forestry research in line with need.

Mr. Chairman and members of the subcommittee, the formula programs represent our foundation. They give us the capacity to deal with the research and extension needs of food, agriculture and natural resources over time. However, we need additional tools. I would like to note that the special grants and special programs conducted in research under the authority of PL 89-106 and in Extension under the authority of Section (3)(d) of the Smith-Lever Act, are such tools and are important complements to our base programs.

Targeted efforts on critical or emerging issues can be effectively conducted under these authorities. The proposed water initiatives we recommended earlier would fall in these authorities, for instance. The negative attitude of the Administration is unwarranted and we believe these "tools" are frequently the best available which this subcommittee recognizes.

I wish to express our appreciation for the past support that this subcommittee has given our system. We will be happy to answer any questions you have.

AGRICULTURAL SCIENCE & EDUCATION
FISCAL YEAR 1988 APPROPRIATIONS RECOMMENDATIONS
In Thousands of Dollars)

Cooperative State Research	FY 1987	President's FY 1988	NASULGC Recommendations
Hatch Act	$148,792	$155,545	$173,792
McIntire-Stennis	12,412	12,975	25,000
1890 & Tuskegee	22,320	23,333	26,080
Animal Health (Section 1433)	5,476	-0-	6,400
Research Grants (PL 89-106)*			
Competitive Research Grants	40,651	44,500	59,000
Special Research Grants	28,037	-0-	49,941
Rangeland	475	-0-	500
Extension			
Smith-Lever:			
Formula	$229,713	$237,594	$241,484
Special Programs*	76,244	-0-	163,625
D.C. Extension	935	970	983
1890 Colleges & Tuskegee	16,877	18,291	18,291
1890 Facilities	-0-	-0-	10,000
Renewable Resources Extension	2,378	-0-	2,500
Higher Education			
Competitive Graduate Training Grants	2,852	-0-	10,000
1890 Strenghthening Grants	1,902	1,988	2,000
Challenge Grants	-0-	-0-	10,000

*See Table 2 for details

TABLE 2: GRANTS AND SPECIAL PROGRAMS
FISCAL YEAR 1988 APPROPRIATIONS RECOMMENDATIONS
(In Thousands of Dollars)

Public Law 89-106	Fiscal 1987	Presidents FY 1988	NASULGC Recommendations
Competitive Research Grants(Section B)			
Biotechnology	19,016	19,016	25,000
Plant Sciences	12,126	15,484	20,000
Animal Sciences	4,279	7,000	10,000
Pest Science	2,853	-0-	-0-
Human Nutrition	2,377	3,000	4,000
Total	$40,651	$44,500	$59,000
Special Research Grants (Section C)			
Integrated Pest Management	$2,940	-0-	$3,434
Pesticide Clearance	1,369	-0-	1,440
Minor Use Animal Drugs	229	-0-	240
Pesticide Impact Assessment	1,968	-0-	2,069
Rural Development Centers	363	-0-	379
Animal Health	5,705	-0-	6,666
Aquaculture	485	-0-	518
Germplasm Resources	-0-	-0-	1,000
Tropical and Subtropical	3,091	-0-	3,250
Acid Precipitation	661	-0-	695
Biological Impact Assessment	-0-	-0-	250
Water Quality and Management	-0-	-0-	25,000
Special Problem Grants	11,226	-0-	5,000
Total	$28,037	-0-	$49,941
Extension (3)(d)			
Food, Nutrition, and Health	$57,635	-0-	$90,224
National Nutrition Education	(-0-)	-0-	(30,000)
EFNEP	(57,635)	-0-	(60,224)
Pest Management	7,164	-0-	7,486
Pesticide Impact, Assessment	1,633	-0-	1,716
Urban Gardening	3,329	-0-	3,479
Rural Devel. Center	689	-0-	720
IRM	47	-0-	-0-
Farm Safety	970	-0-	-0-
Agricultural Competitiveness & Profitability	4,777	-0-	30,000
Water Quality and Management	-0-	-0-	15,000
Revitalization Rural America	-0-	-0-	15,000
Total	$76,244	-0-	$163,625

STATEMENT OF HAROLD R. BENSON

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, I AM HAROLD BENSON, ADMINISTRATOR OF THE COOPERATIVE EXTENSION PROGRAM AT KENTUCKY STATE UNIVERSITY AND MEMBER OF THE DIVISION OF AGRICULTURE BUDGET COMMITTEE REPRESENTING THE 1890 INSTITUTIONS AND TUSKEGEE UNIVERSITY.

I AM HONORED TO HAVE THE OPPORTUNITY TO TESTIFY ON BEHALF OF THE COOPERATIVE EXTENSION SYSTEM WITH PARTICULAR EMPHASIS ON THE EXTENSION PROGRAMS AT THE HISTORICALLY BLACK LAND-GRANT INSTITUTIONS. MY REMARKS WILL BE LIMITED TO TWO MAJOR ISSUES: APPROPRIATIONS FOR THE 1890 EXTENSION PROGRAMS FOR OPERATIONS, AND APPROPRIATIONS FOR THE UPGRADING OF OUR EXTENSION FACILITIES.

THE 1977 AND 1981 FARM BILLS AUTHORIZED APPROPRIATIONS FOR EXTENSION AT THE 1890 COLLEGES AND TUSKEGEE UNIVERSITY. THE FUNDING LEVEL FOR COOPERATIVE EXTENSION AT THESE INSTITUTIONS WAS SET AT A PERCENTUM OF FORMULAR FUNDING. SECTION 1415 OF THE FOOD SECURITY ACT OF 1985 EXTENDED THIS AUTHORIZATION AND STATED THAT APPROPRIATIONS FOR EXTENSION SHOULD NOT BE LESS THAN SIX PERCENTUM OF THE TOTAL APPROPRIATIONS FOR SMITH-LEVER AND RELATED ACTS PERTAINING TO COOPERATIVE EXTENSION WORK AT THE LAND-GRANT INSTITUTIONS AS IDENTIFIED IN THE ACT OF MAY 8, 1914. MR. CHAIRMAN, THE 1890 INSTITUTIONS AND TUSKEGEE'S LAST APPROPRIATION IN COMPLIANCE WITH THIS AUTHORIZATIN WAS IN 1982. TODAY, THESE FUNDS ARE NEEDED IN OUR EXTENSION PROGRAM TO HELP RESTORE ECONOMIC PROSPERITY TO OUR AGRICULTURAL AND RURAL AREAS. OTHER DEMANDS ON EXISTING FUNDS CONSIST OF ADDITIONAL FRINGE BENEFITS SUCH AS THE NEW FEDERAL RETIREMENT SYSTEM AND THE INCREASED COST OF HEALTH BENEFITS.

THE IMPORTANCE OF MODERN FACILITIES AND EQUIPMENT HAS BEEN RECOGNIZED AS A NATIONAL PROBLEM, HOWEVER, IT IS PARTICULARLY SERIOUS AMONG THE 1890 INSTITUTIONS AND TUSKEGEE WHO ARE ALSO CHARGED WITH THE MISSION OF TEACHING, RESEARCH AND EXTENSION. ALTHOUGH FACILITY AND EQUIPMENT NEEDS VARY, SOME OF THE MORE COMMON PROBLEMS ARE:

1. OLD, UNHEALTHY AND DETERIORATED BUILDINGS NEED MAJOR RENOVATION;

2. FACILITIES ARE NEEDED TO CAPITALIZE ON NEW AND EMERGING TECHNOLOGIES;

3. CURRENT PROGRAM STAFF REQUIREMENTS ARE BEYOND FACILITY CAPACITY; AND

4. THE RANGE OF COMMUNITY SERVICES ARE SEVERELY LIMITED BY THE LACK OF ADEQUATE FACILITIES.

THE MAJOR FUNDING OF 1890 EXTENSION PROGRAMS IS PROVIDED BY CONGRESS, AND IN VERY FEW CASES SOME ASSISTANCE FROM STATE AND LOCAL GOVERNMENTS. AS A RESULT, THE EXTENSION PROGRAMS AT THESE UNIVERSITIES RECEIVE LITTLE OR NO ASSISTANCE FOR FACILITIES. THE EXTENSION FACILITIES AT MOST 1890 INSTITUTIONS AND TUSKEGEE ARE INADEQUATE; THEREFORE, WE REMAIN IN GREAT NEED OF FACILITIES.

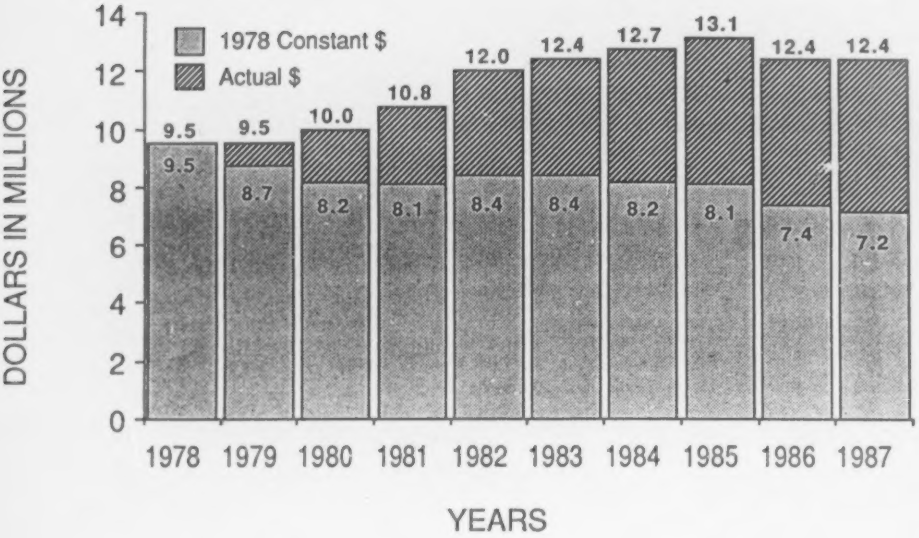
WE ARE REQUESTING $10 MILLION PER YEAR FOR THE NEXT FIVE YEARS, FOR EXTENSION FACILITIES AS AUTHORIZED UNDER SECTION 1416 OF THE FOOD AND SECURITY ACT OF 1985. IF THE $10 MILLION THAT HAS BEEN APPROPRIATED FOR 1890 RESEARCH FACILITIES OVER THE PAST FIVE YEARS IS CONTINUED AND DIRECTED FOR 1890 EXTENSION FACILITIES, THERE WOULD NOT BE A SIGNIFICANT INCREASE IN THE OVERALL BUDGET FOR THESE INSTITUTIONS.

MR. CHAIRMAN, WE ARE THEREFORE, REQUESTING THAT YOU AND YOUR COMMITTEE CONSIDER TWO VERY IMPORTANT ITEMS. FIRST, WE ASK THAT YOU

INCREASE THE FY '88 APPROPRIATIONS FOR 1890 EXTENSION PROGRAMS AT THE AUTHORIZED AMOUNT TO BE EQUAL TO NOT LESS THAN 6% OF THE TOTAL APPROPRIATIONS FOR SMITH-LEVER AND RELATED ACTS PERTAINING TO COOPERATIVE EXTENSION WORK AT THE LAND-GRANT INSTITUTIONS AS IDENTIFIED IN THE ACT OF MAY 8, 1914. SECOND, WE ASK THAT YOU FUND AND APPROPRIATE $10 MILLION FOR EXTENSION FACILITIES.

MR. CHAIRMAN, WE WILL BE MOST APPRECIATIVE OF ANY CONSIDERATIONS TOWARD THESE REQUESTS. IT HAS BEEN MY PLEASURE TO BE HERE TODAY, AND IF I CAN BE OF ANY FURTHER ASSISTANCE, I WOULD BE PLEASED TO DO SO.

CSRS/SAES FUNDING HISTORY, 1978-87
MCINTIRE STENNIS FUNDS



STATEMENT OF DR. LUCINDA NOBLE

The nationwide Cooperative Extension system has as its basic mission to improve American agriculture and strengthen American families and communities through the dissemination and application of research-generated knowledge and leadership techniques. Cooperative Extension is an educational resource to the people of the United States for extending research results and advances in technology.

The Smith Lever Act of 1914 established the system as a unique funding partnership of federal, state and local governments which is the structural and organizational cornerstone of the nationwide system.

A major thrust of the Cooperative Extension System this past year has been to restructure and target programs to address critical national issues. The accelerating expansion of technology, the deteriorating economic situation in portions of the agricultural sectors, the dynamic social conditions faced by many Americans, rural and metropolitan, require Extension to reassess priorities and continuously adapt programs and activities to meet human needs.

FORMULA FUNDS

The Cooperative Extension System represents a Federal, State and County partnership with the partners sharing in program decisions and funding commitments. The base funding at the federal level includes Smith-Lever 3 (b)+(c), the funding for the 1890 Institutions, District of Columbia, and Federal Administration.

The critical roles of the Cooperative Extension Systems as a nationwide network and resource working in the national interest are:

- o Adapting and transferring science and technology, e.g.,
  - ..improving pest management to improve quality of food and reduce production costs and environmental degradation
  - ..developing new food products and increase marketing opportunities
  - ..reducing soil losses from erosion
- o Identifying and responding to critical national issues, e.g,
  - ..deteriorating water quality
  - ..farm bankruptcies and crisis among farm lenders
  - ..substance abuse
  - ..health threats from inactivity and imprudent diets
- o Coordinating the response of federal, state and local governments to national concerns and disasters, e.g.,
  - ..whole herd reduction and conservation reserve programs
  - ..floods, blizzards, hurricanes, tornadoes
  - ..establish coordinated communications
- o Developing and delivering educational programs regarding significant policies and regulations that impact agriculture and rural America, e.g.,
  - ..improved water quality
  - ..farmland preservation
  - ..rural transportation
  - ..labor regulations
- o Providing volunteer assistance

Our appreciation to the U.S. Department of Agriculture for supporting a full base budget (Smith Lever 3b & c) and with a 3.4% increase and additional funding for extension programming at the 1890 institutions, and Tuskegee and the District of Columbia.

Base funding at the FY 85 level is requested. This level of funding will be required for the Cooperative Extension System to continue essential programming in our basic programs-agriculture and natural resources, 4-H youth development, home economics and rural and community development.

Smith-Lever 3(b)+(c)	$241,848,000
1890 Institutions	18,291,000
District of Columbia	983,000
Federal Administration	5,898,000

EXTENSION SPECIAL PROGRAMS-3(d) AND RENEWABLE RESOURCES ACT

Designated funding has resulted in effective targeted programs to address important national concerns. Continuation of these programs at this time is necessary if the problems at which they are directed are to be mitigated. Proposed reductions in federal revenue-sharing make it unikely that they will be assumed by the other partners. We urge restoration of the following targeted programs at FY 85 levels:

Farm Financial Management ($1,491,000)

The $1,491,000 provided in FY 86 is supporting urgently needed expanded efforts to address the needs of financially distressed farm families in fourteen states. Computer-assisted farm enterprise analysis, statewide hotlines, counseling centers, cooperative efforts with lenders and other public agencies are among the many expanded efforts being supported from these funds. Their continuation is of crucial importance to those most directly involved in resolving the problems impacting a still increasing number of families, small towns and rural communities accross the nation.

Integrated Pest Management ($7,486,000)
Pesticide Impact Assessment ($1,716,000)

The Integrated Pest Management Program provides a highly effective, systematic approach to delivering pest management technology to farmers and the agribusiness industry. Projects are targeted to each State's agricultural need and provides transfer of the latest research to increase agriculture's profitability. The effective use of pesticides contributes to environmental improvement, lower farm input costs and increased water quality. Pesticide Impact Assessment is a necessary corrollary to successful IPM programs.

Renewable Resources Extension Act ($2,500,000)

The private forest and rangeland resources of the nation can realize their economic potential through a program of accelerated technology delivery made possible by the Renewable Resources Extension Act. Private landowners control a majority of the nation's resources and will benefit through increased productivity from Cooperative Extension's education programs. In return for a small investment the nation will recieve increasingly productive resources for the future.

Expanded Food and Nutrition Education Program ($60,224,000)

The Expanded Food and Nutrition Education Program has clearly demonstrated the effectiveness in helping low-income families improve their diets. Better health, lower health costs, and increased family stability are among the direct results. Such education is most critical to this clientele, which includes a high proportion of pregnant women and young children, if they are to achieve a minimally adequate diet with the resources available to them. The continuation of the line item at the $60,224,000 level will avoid the termination of this educational support to those who need it most.

Rural Development Centers ($720,000)

Four rural development centers serving all states are supported by this appropriation. The centers provide a focus for technology transfer and citizen awareness of the critical economic and social issues of rural America. Through cooperative arrangements with research and extension faculty, the centers encourage economic development and diversification, efficient community services and a knowledgeable leadership base for key decision-makers.

Urban Gardening ($3,479,000)

The Urban Gardening Program enables urban youth and adults to grow products with a market value of more tha $20 million annually. They improve the diets and health of those individuals and families and enhance community cooperation and satisfaction among participants. Restoration of the Urban Gardening line item at the FY 86 budget level will avoid the discontinuation of these efforts.

1890 EXTENSION FACILITIES ($10,000,000)

Institutions eligible under the Act of 1890 will be assisted in the acquisition and improvement of extension facilities and equipment, so that they may participate fully with the State Cooperative Services in a balanced way in meeting the needs of the people of their respective States. This authorization of $10 million annually will continue through fiscal 1990.

This appropriation will be made available for grants to the eligible institutions for the purpose of assisting in the purchase of equipment and land, and the planning, construction, alteration, or renovation of buildings, to provide adequate facilities to conduct extension work in their respective States.

This request (anticipated to cover five years totalling $50 million) follows the completion of five annual grants-totalling $50 million - to the 1890 institutions for agricultural research facilities.

EXTENSION INITIATIVES - FY 88 BUDGET

The nation is faced with issues of large and complex proportions. The Cooperative Extension System is involved with the land-grant universities in addressing these current national issues which require additional multi-disciplinary educational strategies. Resources are not adequate to intensify these programs to the extent necessary to impact the problems facing the nation. Leadership and funding by the federal partner will enable states to deal more directly with these issues. These include:

- Restoring Profitability to U.S. Agriculture - $30 million
- Food, Nutrition and Health - $30 million

- Water Quality and Management - $15 million
- Revitalizing Rural America - $ 15 million

We would particularly call your attention to water quality and management as a critical concern throughout the USA. The nation's health and well-being are directly dependent upon the management of its soil and water resource base. Surface water and groundwater reservoirs are subject to depletion and/or deterioration if not well-managed and protected. They are absolutely essential for meeting the demand for food, fiber and forest products, and to maintain human health.

Thirty-four States have identified agricultural nonpoint source pollution as a major problem. Twenty-nine States have cited pesticides and septic tank seepage as primary nonpoint sources of groundwater pollution. The competition from recreational, industrial and municipal demands for water supplies, increased use of marginal and droughty soils, declining groundwater levels, detriorating water quality and increasing needs for water, head an array of serious problems which must be addressed now.

Economically sound technology systems, which incorporate effective soil and water conservation and water quality improvement practices, must be developed, delivered and adopted, to ensure proper management and conservation of these resources.

In behalf of the Extension Committee on Organization and Policy (ECOP), I want to express gratitude for the continued and substantial investment Congress has sustained in the Cooperative Extension Service and land-grant system. Be assured, both remain true to their heritage-service to people and to the nation.

STATEMENT OF CHARLES KRUEGER

Research is our key asset in the struggle for international competitiveness. The State Agricultural Experiment Station System which begins its "Second Century" of agricultural research in FY 1988, has the ability to address and help solve this national need. The achievements of the first 100 years are well documented and have added significantly to the security and stability of this nation. Two-thirds of the publicly funded agricultural research in the nation is conducted by the 12,500 scientists, 13,000 graduate students, and 7,200 technicians who make up this successful and unique system. Federal funding for agricultural research has leveraged state funding nearly 400 percent.

The FY 1988 Division of Agriculture, NASULGC budget recommendations for the USDA programs of the Cooperative State Research Service reflect the need to enhance the base research program of the state agricultural Experiment Stations while strengthening the ongoing and new research priority initiatives through specific special and competitive grants. These budget recommendations were developed by the Experiment Station Committee on Organization and Policy (ESCOP) from the recent extensive ESCOP planning process that resulted in the documents, "Research Initiatives, A Research Agenda for the State Agricultural Experiment Stations," and "Research Dynamics, The Base Program of Research in the State Agricultural Experiment Stations." The recommendations are also consistent with the "FY 1988 Priorities for Research, Extension, and Higher Education," prepared by the Joint Council on Food and Agricultural Sciences of the USDA.

The recommended increases in the base or formula programs (Hatch Act, McIntire-Stennis Cooperative Forestry, Evans-Allen Program, Animal Health and Disease) are needed to accelerate our efforts in basic and applied research in four areas: restoring agriculture and forest profitability, sustaining soil productivity, focusing on human resources (rural communities and food/nutrition/health relationships), and new food and non-food uses of agricultural products. A new initiative in the critical area of water quality and management, requested in FY 1987, but not funded, is again requested in FY 1988. This research effort of $25,000,000 will focus on sources, prevention, and control of water pollution; fate of chemicals in the soil and water system; treatment of contaminated soil and water supplies; and risk assessment to address toxological, economic, social, legal, and political consequences of water quality and management programs. The increasing volume of monitoring data on water quality shows this is a serious national problem and one that needs immediate attention. It can be addressed by scientists in the State Agricultural Experiment Stations. ESCOP requests that competitive funding be provided again through Special Research Grants of a national scope in the areas of integrated pest management, pesticide clearance, minor use animal drugs, pesticide impact assessment, rural development, animal health, aquaculture, germplasm resources, tropical and subtropical agriculture, acid precipitation, rangeland resources, and biological impact assessment.

Our basic research capacity must be enhanced to provide the new knowledge base needed in agriculture. Approximately 40 percent of the research conducted by the State Agricultural Experiment Stations is basic or fundamental in emphasis. The Competitive Research Grants programs has been a successful mechanism for encouraging such fundamental science. ESCOP recommends increases for basic research in plant science, human nutrition, animal science, and the new program in biotechnology. ESCOP also recommends establishing university interdisciplinary science and technology centers in plant science that have a strong industrial linkage.

Included with this testimony is a copy of the FY 1988 ESCOP Budget Recommendations as approved by the Division of Agriculture, National Association of State Universities and Land-Grant Colleges. The budget request is presented in two parts. The first outlines the dollars by traditional budget categories, and the second details the uses to be made of the additional resources. The dollar amounts included are identical with those shown in the Division of Agriculture budget booklet.

Table 1. Recommendations for Federal Funding of the State Agricultural Experiment Stations through CSRS/USDA.

	FY 1987 Appropriation	Executive FY 1988 Recommendation	ESCOP FY 1988 Recommendation
	------------------	(x 1,000)	----------------
Formula Funds			
Hatch Act	$148,792	$155,545	$173,792 1/
McIntire-Stennis Cooperative Forestry	12,412	12,975	25,000
Evans-Allen Program	22,320	23,333	26,080 1/
Animal Health and Disease (Sec. 1433)	5,476	0	6,400 1/
Grant Funds 2/			
Special Research (PL 89-106)	28,512	0	50,441
Competitive Research (PL 89-106)	40,651	44,500	59,000
Administration			
Federal	144	1,917	1,917 3/
TOTAL	$258,307	$238,270	$342,630

1/ Represents an 11.1% increase over the FY 1985 appropriation. The projected increases in GNP deflator and CPI are 13.0% and 11.7%, respectively, for the period FY 1985 through FY 1988.

2/ Details are shown in Tables 2 and 3.

3/ Includes support for an Office of Agricultural Biotechnology, peer review panels for project grant awards, operating costs for the Office of Grants and Program Systems, and increased pay and retirement costs.

Table 2. Special Research Grants (PL 89-106) 1/

	FY 1987 Appropriation	Executive FY 1988 Recommendation	ESCOP FY 1988 Recommendation
	------------------	(x 1,000)	----------------
Continuing National Research Programs 2/			
Integrated Pest Management	$2,940	0	$3,434
Pesticide Clearance	1,369	0	1,440
Minor Use Animal Drugs	229	0	240
Pesticide Impact Assessment	1,968	0	2,069
Rural Development Centers	363	0	379
Animal Health (Sec. 1414.c.1)	5,705	0	6,666
Aquaculture	485	0	518
Germplasm Resources	0	0	1,000
Tropical and Subtropical	3,091	0	3,250
Acid Precipitation	661	0	695

Rangeland (Subtitle M, PL 97-98)	475	0	500
Biological Impact Assessment	0	0	250
New National Research Program			
Water Quality and Management	0	0	25,000
Special Problem Grants 3/	11,226	0	5,000
TOTAL	$28,512	0	$50,441

1/ Awards are made on a competitive basis to fund ongoing national programs, except those state specific grants identified by the Congress.

2/ The funding requested equals either the FY 1985 or FY 1986 appropriation whichever was higher, except for integrated pest management and animal health which represent an 11.1% increase over the FY 1985 appropriation.

3/ Numerous special problem grants are established to deal with acute situations in specific states. Where these problems persist, they can usually be incorporated into the ongoing programs of the Agricultural Experiment Station after one or two years.

Table 3. Competitive Research Grants (PL 89-106) 1/

	FY 1987 Appropriation	Executive FY 1988 Recommendation	ESCOP FY 1988 Recommendation
	(x 1,000)		
Plant Science	$12,126	$15,484	$16,500
Plant Science Centers	0	0	3,500 2/
Human Nutrition	2,377	3,000	4,000
Animal Science	4,279	7,000	10,000
Biotechnology	19,016	19,016	25,000
Pest Science	2,853	0	0 3/
TOTAL	$40,651	$44,500	$59,000

1/ This program has national support as a funding mechanism to enrich and expand basic research in several fundamental areas important to the agricultural and general economy of this nation. ESCOP also supports restoration of the forestry competitive research grants program at $8 million that was in the U.S. Forest Service budget.

2/ A joint USDA-National Science Foundation-Department of Energy competitive grants program in plant science to address basic aspects of plant biotechnology, rhizosphere dynamics, and microbial ecology.

3/ The funding for pest science is incorporated into the plant and animal science competitive research grants programs.

STATEMENT OF ALLAN GOECKER

Mindpower will determine the future efficiency and economic performance of America agriculture. It is the critical factor which will help assure profitability and excellence in the "new agriculture". RICOP urgently recommends three programs in FY 1988 which will attract excellent students and upgrade higher education programs. These key programs will help reverse the serious erosion of the U.S. agricultural and natural resources expertise base.

Members of Congress are especially commended for their wisdom in establishing the **National Needs Graduate Fellowship (Training Grants) Program** in 1984 to attract distinctly superior graduate students to the food and agricultural sciences. Doctoral fellows in this program have Graduate Record Examination (GRE) scores which are some 300 points higher than the average doctoral student in agriculture or health science disciplines.

These doctoral fellows will likely become the future scientific and professional leaders of American agriculture. Universities will continue to compete for fellowship (training grant) funds and will select recipients to minimize administrative costs. A $10.0 million appropriation in FY 1988 will provide up to three years of support to 200 new fellows in targeted areas of national need.

A **National Challenge Grants Program** is essential to help upgrade college programs to better educate food, agricultural, and natural resource scientists. This joint-venture challenge grants program will require university competitors to generate resources from local and private sources to match Federal grants. Grants will be targeted to expand summer research apprenticeships for high school students, develop strong research programs for undergraduates, improve curricula, foster regional programs to provide highly specialized instruction, develop instructional partnerships between businesses and colleges, and support other high priority proposals. A $10.0 million Federal appropriation in FY 1988 will generate at least $20.0 million to upgrade programs.

Continuation of the Strenghtening Grants Program for 1890 Colleges at $2.0 million in FY 1988 will help these important universities develop and enhance curricula, upgrade faculty, increase library resources, improve instructional equipment, and expand student recruitment and retention activities.

STATEMENT OF DAVID B. THORUD

I am David B. Thorud, Dean of the College of Forest Resources at the University of Washington, Seattle. This testimony is offered in my capacity as president of the National Association of Professional Forestry Schools and Colleges (NAPFSC), an organization that represents 62 university-level research, extension, and instructional programs. We appreciate this opportunity to comment on the McIntire-Stennis Cooperative Forestry Research Program.

The McIntire-Stennis Act (M-S) of 1962 was enacted to promote forestry research and graduate education, recognizing that research and education are the driving forces for this nation's wise and efficient development and use of forest and related rangeland resources. This act authorized the Secretary of Agriculture to provide assistance on a matching basis to land-grant colleges, agricultural experiment stations, and other state-supported colleges or universities offering forestry education. The act authorized federal appropriations up to one half of the amount appropriated for federal forestry research conducted directly by the Secretary of Agriculture.

Appropriations for the M-S programs have increased only modestly since 1964, attaining an appropriation of $12.4 million in 1986. This is approximately 10 percent of the appropriations for federal forestry research conducted directly by the Secretary of Agriculture.
The rational for increasing McIntire-Stennis funding to $25 million is to ensure the continued effectiveness of the act and to significantly strengthen the role of technology in increasing U.S. forestry competitiveness, while providing greater noncommodity benefits from our vast forestlands.

Forests clearly play an important role in America's economic system and are intimately woven into the fabric of American society. From the morning newspaper to a spiritually renewing walk in the woods, forests enhance the quality of life for all Americans.

The United States ranks third among nations in commercial forestland and first in industrial timber production. Commercial forests in the United States cover 482 million acres. An outstanding characteristic of this vast resource is its local and regional diversity. Forests differ greatly in species, productive potential, and location with respect to population centers. The vast southern pine belt differs significantly from the northern hardwood region. Neither is comparable to the stately Douglas-fir areas of the Pacific Northwest or the forested mountains and extensive rangeland of the Intermountain West. This biological, climatic, and topographical diversity necessitates management strategies and research programs specifically tailored to regional and state needs and opportunities.

The diversity of the nation's forest resources extends to forestland ownership as well. Private nonindustrial landowners, including farmers, hold over half of the commercial forestland in the United States.

Diversity is also a key characteristic of the array of goods and services provided by America's forest resoruces. Forest-based tourism and recreation are the primary local industries for many communities and contribute significantly to the national economy. Water, wildlife, and domestic animals are also important products of our forests and associated rangelands. All major rivers in the west and most in the east have their origins in forested mountains.

In terms of jobs and direct economic contributions, the most important product from our forests is wood. Our vast forest resources support one of the nation's major industries, forest products. The tonnage of wood handled each year by this industry exceeds the annual tonnage of steel, aluminum, cement, and plastics combined. And the advantage of wood over other materials is that it is a renewable resource. Properly managed, it will never be depleted.

The forest products industry adds about $62 billion to the value of the U.S. economy each year, which represents 7.5 percent of the total value added in all manufacturing. Forest products companies also employ 1,745,000 people in jobs as diverse as the industry itself. This represents 9 percent of all the people employed in U.S. manufacturing, or 1 out of every 11 employees.

Forest products will become even more important in the future. World demand is expected to grow in the decades ahead, and timber growing stock in the United States is projected to increase as well. U.S. forest products can be manufactured at costs that are competitive throughout the world. A report on wood by the Congressional Office of Technology Assessment states that "the United States is well positioned to satisfy both domestic and a major share of future global forest product requirements."

The key to future expansion will be the health and vitality of the forest resource. Forestry research and education play essential roles in helping ensure that consumer costs are kept low and export opportunities can be met without jeopardizing the other important values of the forest.

Forestry research is a cooperative venture among scientists from many disciplines employed by a variety of federal, state, and private organizations. Their projects range from fundamental studies of the chemistry of wood cells to practical evaluations of intensive timber management. Forestry research is coordinated by the universities and the U.S. Forest Service through a cooperative network of planning groups and advisory councils, ensuring maximum productivity of the research effort and of the forest resources themselves.

In addition to these national planning efforts, more detailed and localized coordination is done through four regional planning groups, whose planning areas coincide with those used by other science and education agencies.

The private sector also gets involved in various planning efforts, which provide at least two principle benefits:

1. They help the forestry schools and the U.S. Forest Service focus research programs on the most important questions.
2. They facilitate the transfer of technology from research results to on-the-ground application and implementation by mobilizing information to solve real problems.

John Naisbitt has become famous by looking into the future. In his book Megatrends, he wrote: "Things aren't going to get better. They're going to get different." Another well known philosopher, Pogo, said much the same thing: "The future just isn't what it used to be."

We know that the future will be different - and inevitable. The question is: How can those of us with a strong interest in forestry best prepare and position ourselves for that future?

First of all, we must prepare for the future through cooperation. Twenty-five years ago, the foresight and leadership of Senator John Stennis and Representative Clifford McIntire led Congress to establish a partnership of the federal government, state governments, and scientists from the public forestry schools.

The second preparation for the future must involve research. We have had many past successes, and we must continue to expand that resrvoir of knowledge by being open to new approaches. We now have the ability to study the very buildling blocks of nature - cell components and characteristics. Advances in biotechnology and tissue culture shorten many time-consuming research steps.

The McIntire-Stennis program supports down-to-earth research, not pie-in-the-sky projects. It is work that has yielded, and will continue to yield, substantial economic benefits.

In the first place, forests are our number-one renewable resource. Research creates new forest product innovations and finds new uses for forest-based materials. Moreover, we must use our scientific ability to stay competitive globally. Through advanced technology, forests can be a valuable source of raw materials for the industrial economy.

The third necessary component of a successful future is education. Through the McIntire-Stennis Cooperative Forestry Research Program, thousands of young men and women have received advanced degrees. They are the real future of forestry. Whether in basic research, commercialization of new products, or work with the public, they are the ones who will continue the efforts to both use and protect our natural resoruces. With an eye on the future, McIntire-Stennis ensures a continuous infusion of intellectual resources and future scientists into the foresty research community.

An appropriation of $25 million will stimulate the development of technology and scientific expertise to increase U.S. forestry competitiveness and provide greater amenities from our forestlands. The focus of additional funds will be to:

- Enhance profitability for both industrial and nonindustrial forest landowners;
- Expand domestic and foreign markets for forest products;
- Strengthen development of scientific and professional expertise;
- Expand biotechnology and basic research to increase productivity; and
- Increase our ability to produce timber while maintaining the water, wildlife, recreation and range resources.

Expanded funding will also meet the major goal of the McIntire-Stennis program by providing trained scientists with expertise to solve current and future forest resource problems.

Investment in this program has leveraged severalfold in nonfederal funding. It offers an unprecedented opportunity for substantial advances in technologies to further U.S. forestry competitiveness, and to more adequately provide for the many and diverse products and rewards derived from our renewable forests.

The proposed investment will also allow the nation's forestry schools to respond more effectively to the original intentions and expectations of the McIntire-Stennis Act.

The knowledge and technologies developed by forest scientists are the foundation for an improved social and economic forest resource base, one which serves, and will continue to serve, our citizens and those of the world.

Mr. Chairman, I also recommend that funding levels for implementation of the Renewable Resources Extension Act and Smith-Lever 3(b) and (c) be at least at the levels set by Congress for FY 1987: $2.378 million and $229.7 million. The reason is simple. These dollars are going to programs that ultimately put new technology into practice, programs in which society finally realizes the benefits of its investment in research.

[CLERK'S NOTE.—The following questions were submitted in writing by Senator Grassley. The responses are by Dr. Lucinda Noble:]

QUESTIONS SUBMITTED BY SENATOR GRASSLEY

Question. Dr. Noble, would you please tell me what the Extension Service is doing to bring about the recovery of the agriculture economy?

Answer. The Cooperative Extension System is devoting more than one-third of its total educational effort to Enhancing Competitiveness and Profitability of American Agriculture currently. Extension educational programs have:

a. Provided intensive assistance on financial planning to nearly 100,000 farm families in the past 3 years.

b. Showed farmers how to reduce operating cost.

c. Demonstrated how to cut farm energy consumption in crop production.

d. Showed crop and animal producers how to improve their productivity.

Question. What is the Extension Service doing to help farmers on an individual basis to cope with the farm crisis?

Answer. Working individually with farm families in 21 states—largely Cornbelt and Southern states—where the need was most acute, the programs included:

a. Toll-free telephone hotlines for distressed farm families.

b. Computer programs to help farmers prepare financial statements and business plans of action.

c. Intensive workshops to show farmers how to carry profitability beyond 1986 to the year 2000.

d. Cooperation with other service agencies such as state employment offices, mental health facilities and so on.

Question. Would you please identify the funding that is proposed to be cut off, that would hinder the Extension Service's efforts in these areas?

Answer. The funding proposed to be eliminated in the President's budget is as follows:

a. $1,427,000—3(d)—Farm Financial Management.

b. $3,335,000—3(d)—Section 1440 funds in nine states.

The need in this category is so critical throughout American agriculture, we have requested these funds be increased to $30,000,000 in fiscal year 1988.

COUNCIL ON AGRICULTURAL RESEARCH, EXTENSION, AND TEACHING

STATEMENT OF CHARLES McDOUGALL, EXECUTIVE DIRECTOR

ACCOMPANIED BY BONNIE HAMMERSTEDT, NEW JERSEY DELEGATE TO CARET

Senator BURDICK. Our next witness is Mr. Charles McDougall, executive director of CARET.

Mr. McDOUGALL. Mr. Chairman, I have with me Ms. Bonnie Hammerstedt, the CARET delegate from New Jersey, who is going to speak on behalf of the CARET organization.

Ms. HAMMERSTEDT. Mr. Chairman, I am Bonnie Hammerstedt, and I represent the Council for Agricultural Research, Extension, and Teaching, and the delegate representing the 1988 budget committee.

We are most grateful to you, Mr. Chairman, for providing us the opportunity to appear before the subcommittee to present the views of the CARET organization which has a vital and growing interest in agricultural research, extension and teaching programs.

The CARET organization represents a unified voice of support for our federal, state, and local cooperative programs in agricultural research, extension, and teaching. As users of products of research, extension, and teaching, we know the value of these programs. As advisors, in our respective states, we help plan these programs, yes, and even criticize them if they are not serving our needs. I can assure you that every part of these programs is accountable where it counts, with the people at home.

We are in the midst of a major change in American agriculture. Competitive global markets, new technology developments and the restructuring of agriculture make us more dependent on the capability of our science and educational systems to provide answers to help us build a new agriculture.

At first, farmers thought a belt tightening for 2 or 3 years would help us weather the storm. How wrong we were. The downturn for agriculture has stretched from 2 to 7 years. The harsh realities of the late eighties are more visible than ever and we are trying to cope with them but find we need better tools to regain our competitive edge.

As an industry, we cannot stand still and there is no alternative but to aggressively pursue and adopt new technologies or our markets will fall to our competitors who do invest in those new technologies. We can ill afford to follow the path of our automobile industry and learn the lessons too late. We must work hard to earn back our competitive advantage and to compete in domestic and global markets.

The dominant factor that will determine the efficiency and economic performance of American agriculture is the development of people and the quality of expertise needed to build our future. For several years we have recognized the serious erosion of expertise in the food and agricultural sciences. Right now there are serious shortages in agriculture engineering, food technology, marketing, and biotechnology.

We needed expanded investments to attract high quality students and to revitalize our graduate programs at our land-grant colleges. The competitive graduate training grants you have supported have established an excellent record and show great promise. Training grants should be continued, rather than shut down. Capable, qualified men and women are the keys to the innovations needed to make our agricultural industry competitive.

This year is the Centennial of the Hatch Act, one of the most important and forward looking legislative acts ever. We take great pride in our state experiment stations' role in the evolution of a science-based agriculture and the spectacular changes that have virtually changed the world in the past century.

However, past achievements in American agriculture are not enough. Today, the increasing demands on research and education have multiplied. Unfortunately, the capacity to meet these demands has been restrained by real dollar reductions in federal funding. If we are to assure continued economic growth and productivity and the well-being of our citizens, we, as a nation, must invest in development of better, more efficient technologies.

With better tools, our farmers can compete in global markets. We must make a major commitment to generating and adopting new efficient technologies, in particular, biotechnology, systems of integrated management, developing and using new marketing alternatives, and developing new products and new uses of old products. Similar attention will be needed in the timber industry to improve their competitive thrusts.

The Extension Service has served the nation for 73 years by effectively adapting and transferring science and technology to point of need. This federal-state-local partnership, with its linkages and collaboration with a variety of other institutions and organizations, is a remarkable information system perfectly designed and positioned to serve.

However, it is this vital link that the administration would sacrifice for marginal budget savings. We strongly believe this is a false economy that ignores our national needs to recapture agricultural competitiveness, to revitalize rural America, to deal with the increasing severe problems of water quality and to meet the national concerns about nutrition and health, as well as the rash of problems a complex agriculture faces.

Mr. Chairman, I would like to briefly focus on one initiative that the National Association of State Universities and Land-Grant Colleges is proposing for fiscal year 1988, and that is water quality management, There is a greater problem for agriculture today than the quality and management of our water resource.

Water quality is critical to agriculture, industry, recreation, and commerce, and yet we take it for granted until a crisis emerges. In our state, we call it a quiet crisis. As a nation, we just cannot afford to grapple with this problem in a normal manner. While major water programs have been added by both agricultural research and extension in recent years, the problem exceeds the capacity and demands expanded efforts. Failure to respond now will result in further contamination, loss of life, and extremely costly corrective measures down the road. Depletion of ground water supplies continue to plague our cities and rural areas. Ground water is our main water supply for drinking and irrigation. Public concerns regarding ground water contamination is increasing.

Our CARET organization is unanimous in support of NASULGC's Division of Agriculture in requesting new funding initiatives in water quality and management for fiscal year 1988. Society has a tremendous stake in preventing contamination and the time to act is now.

In conclusion, as an organization of volunteer leaders, CARET has taken exhausting and painstaking efforts to more fully understand both state and federal funding efforts to support our agricultural science and education programs in our land-grant colleges.

Last year, our volunteer organizations in every state became outraged with the administration's proposed hatchet job on agricultural research and extension. Thousands of letters and contacts were made by real people, people who know the value of the programs, to their congressional representatives. We, as American citizens and voters, are grateful for your support last year in restoring these vital programs.

However, history does seem to repeat itself, and again, we are faced with a recommended zero funding for special research grants and special Extension programs. A proposal to cut programs when the challenges and problems far exceed the capacity of our land-grant colleges to respond adequately is clearly the wrong way to go.

Thank you for the opportunity to come before you and present our views.

Senator BURDICK. Thank you very much for your contribution.

[The statement follows:]

STATEMENT OF BONNIE HAMMERSTEDT

Mr. Chairman, and members of the Committee: my name is Bonnie Hammerstedt representing the Council for Agricultural Research, Extension and Teaching and the CARET delegate representing the 1988 budget committee.

We are most grateful to you, Mr. Chairman, for providing us the opportunity to appear before the subcommittee to present the views of the CARET organization which has a vital and growing interest in agricultural research, extension and teaching programs.

The CARET organization represents a unified voice of support for our Federal-state and local cooperative programs in agricultural research, extension and teaching. As users of the products of research, extension and teaching we know the value of these programs. As advisors, in our respective states we help plan these programs, yes, and even criticize them if they are not serving our needs. I can assure you, every part of these programs is accountable where it counts— with the people at home.

We are in the midst of a major change in American Agriculture. Competitive global markets, new technology developments and the restructuring of agriculture make us ever more dependent on the capability of our science and educational systems to provide answers to help us build a "new agriculture".

Agriculture is a worldwide industry where global markets have a special set of conditions and rules. An important fact is the dynamic—relatively uncontrollable nature of these markets. Countries who once bought our food and fiber are now competing against us for export markets. Decisions by the central bankers in Washington, Tokyo, Bonn and London are as important as the weather for a a global agriculture. Likewise the agricultural policies of the nations are critical.

At first farmers thought a "belt tightening" for two or three years would help us weather the storm. How wrong we were. The downturn for Agriculture has stretched form two to seven years. The harsh realities of the late eighties are more visible than ever and we are trying to cope with them but find we need better "tools" to regain our competitive edge.

As an industry, we can not afford to stand still and there is no alternative to aggressively pursuing and adopting new technologies or our markets will fall to our competitors who do invest in new technology. We can ill afford to follow the path of our automobile industry and learn the lessons too late. We must work hard to earn back our competitive advantage and to compete in domestic and global markets.

WE MUST HAVE THE MIND POWER TO COMPETE

The dominant factor that will determine the efficiency and economic performance of American agriculture is the development of people and the quality of expertise needed to build our future. For several years we have recognized the serious erosion of expertise in the food and agricultural sciences. Right now, there are serious shortages in agriculture engineering, food technology, nutrition, marketing, and biotechnology.

We need expanded investments to attract high-quality students and to revitalize our graduate programs at our land-grant colleges. The competitive graduate training grants you have supported have established an excellent record and show great promise. Training grants should be continued rather than shut down. Manpower shortages in the agricultural field are forecast at 10 percent for 1990, on average, and sharply above this in many critical fields. If we delay investing in people it will be difficult to ever catch up. Capable, qualified men and women are the keys to the innovations needed to make our agricultural industry competitive.

BETTER TECHNOLOGY AND KNOWLEDGE ARE NEEDED TO COMPETE

This year is the centennial of the Hatch Act one of the most important and forward looking legislative acts ever. We take great pride in our state experiment stations role in the evolution of a science based agriculture and the spectacular changes that have virtually changed the world in this past century.

This nation's capacity to develop and apply technology is the single most important variable accounting for our agricultural productivity. It has benefited the American consumers who spend less than 16 per cent of their disposable income for food. At the same time American agriculture and forestry produce about 24 percent of the total exported products of this nation and contribute greatly to our balance of payments.

However, past achievements of American agriculture are not enough. Today, the increasing demands on research and education have multiplied. Unfortunately, the capacity to meet these demands has been restrained by real dollar reductions in federal funding. If we are to assure continued economic growth and productivity and the well being of our citizens, we as a nation must invest in development of better, more efficient technologies.

With better "tools" our farmers can compete in global markets. We must make a major commitment to generating and adopting new efficient technologies, in particular biotechnology, systems of integrated management, developing and using new marketing alternatives, and developing new products and new uses of old products. Similar attention will be needed in the timber industry to improve their competitive thrusts.

KNOWLEDGE HAS TO BE APPLIED TO BE USEFUL

Theory in the classroom, research knowledge in the laboratory are vital components of a variable, scientific agriculture. However, the ultimate test is application where the rubber meets the road. The Extension Service has served the nation for 73 years by effectively adapting and transferring science and technology to point of need. This Federal/State/Local partnership, with its linkages and collaboration with a variety of other institutions and organizations is a remarkable information system perfectly designed and positioned to serve. However, it is this vital link that the administration would sacrifice for marginal budget savings. We strongly believe this is a false economy that ignores our national needs to recapture agricultural competitiveness, to revitalize rural America, to deal with the increasing severe problems of water quality and to meet the national concerns about nutrition and health as well as the hash of problem a complex agriculture faces.

WATER QUALITY AND MANAGEMENT

Mr. Chairman and members of the Subcommittee. I would like to briefly focus on one initiative that the National Association of State Universities and Land Grant Colleges is proposing for FY 1988—Water Quality and Management. There is no greater problem for agriculture and the nation today than the quality and management of our water resource.

Water quality is critical to agriculture, industry, recreation and commerce and yet we take it for granted until a crisis emerges. As a nation we just can not afford to grapple with this problem in a normal manner. While major water programs have been added by both agricultural research and extension in recent years, the problem exceeds the capacity and demands expanded efforts. Failure to respond now will result in further contamination, loss of life, and extremely costly corrective measures down the road. Depletion of ground water supplies continue to plague our cities and rural areas. Ground water is our main water supply for drinking and irrigation. Public concerns regarding ground water contamination is increasing.

Specific sources of groundwater contamination include agricultural chemicals, industrial, military and municipal hazardous waste disposal. Under ground storage tanks and septic systems, natural salts from irrigated soils, energy and mineral production activities pose increased threats of contamination.

A fully coordinated research and educational response is proposed to deal with water quality problems and management.

The ultimate goals is clean water of acceptable quality in the presence of sustained agricultural, industrial and municipal activities. Research and extension programs of our land grant universities have already have had significant beneficial impact on water supply and quality problems. Thye are clearly in a position to tackle the increased challenge to improve water quality and management.

Our CARET organization is unanimous in support of NASULG's Division of Agriculture in requesting new funding initiatives in water quality and management for fiscal 1988. Society has a tremendous stake in preventing contaminations and the time to act is now.

Conclusion

As an organization of volunteer leaders, CARET has taken exhausting and painstaking efforts to more fully understand both state and federal funding efforts to support our agricultural science and education programs in our land grant colleges.

Last year our volunteer organizations in every state became outraged with the admininstrations proposed hatchet job on agricultural research and extension. Thousands of letters and contact were made by real people—people who know the value of the programs—to their congressional representatives. We as American citizens and voters are grateful for your support last year in restoring these vital programs.

However, history seems to repeat itself and again we are faced with a recommended zero funding for special research grants and special Extension programs. A proposal to cut programs when the challenges and problems far exceed the capacity of our land grant colleges to respond adequately is clearly the wrong way to go.

We must think seriously about the viability of our food and agricultural systems. Investment in these programs is vital to our future and in the best interest of our nation. We appreciate the national concern about fiscal responsibility, however, we recognize the critical issuies that the American food and agriculture system faces. It is in this light that we suggest the NASULGC budget recommendations placed before this committee today are realistic, prudent and in the best interest of this great nation. We urge you to give it your full consideration and support.

We thank you for this opportunity to come before you and present our views and stand ready to answer any questions you may have.

NATIONAL FOOD PROCESSORS ASSOCIATION

STATEMENT OF LAWRENCE T. GRAHAM, EXECUTIVE VICE PRESIDENT

Senator BURDICK. Next we will hear from Mr. Lawrence T. Graham, executive vice president of the National Food Processors Association.

Mr. GRAHAM. Thank you, Mr. Chairman. I am Larry Graham, and I am executive vice president of the National Food Processors Association. Our organization represents about 600 member companies that pack processed-prepared fruits, vegetables, meats, fish, and specialty products including canned, frozen, dehydrated, pickled, and other preserved food items. It is fair to say that we represent the major food manufacturing companies in the United States.

We appreciate this opportunity to express our support for adequate funding for the food programs at FDA. This is a rather unusual position for us to be in because FDA regulates the food industry, and we are here saying, keep the FDA strong, and make sure that the food programs remain strong at FDA. I think that several years ago, some of our members would probably have said the opposite, they wouldn't have cared if the FDA disappeared from the face of the earth. I think that this points out the importance of the FDA to the food industry.

Lately, we have seen an erosion in the food programs at FDA, particularly over the last 10 years. Today there is an erosion in the food science capabilities of FDA. There is erosion in the scientific capability. The average age is 47. They are losing people. They are losing some of the best scientists that they had.

How that impacts on the food industry is that there are many technological innovations going on in the industry, new packaging techniques, and new types of food. We need an agency that can understand and, therefore, eventually approve these developments for use in our society. If the agency is not capable of doing this, they are more prone to say no. They are more prone not to approve the types of technologies that many of our companies and others would like to do.

The food programs, as I said, in the last 10 years, have gone down tremendously. The budget submitted by FDA doesn't really reverse this trend, although it stops it somewhat, but it still has a long way to go. More and more of the equipment at the FDA is getting pretty old and obsolete, and they are finding it difficult to attract and retain their staff. They do not have the fine types of scientists that it used to have.

The new processing and packaging techniques in the food industry are really just beginning. I think that you are going to see, particularly in the area of packaging, the innovative side of the food industry. We need an agency that understands this new type of packaging.

We are also concerned in the FDA being staffed to inspect imported products. There is a continuing need to provide sufficient examination of imports to assure that such products meet the same standards of safety and wholesomeness required of domestic production. If imported products are not meeting those standards, it will affect the consumer confidence in our products. We feel that imported foods that are not adequately inspected could have an adverse effect on all of our domestic production too.

Another problem that we see is investigators who do not have the capability to take a more aggressive role on the state standards. Proposition 65 in California is a prime example of a state being involved in regulation, something that has traditionally been FDA's role, the area of food safety. I think that if FDA doesn't remain strong, we are going to see more of that happening. Therefore, we would not have one uniform safety standard in the United States.

Another very important area where FDA has spent a lot of resources is the area of food tampering. It is an essential role that FDA plays in food tampering types of situations. They assure that our food is safe. FDA does a very good job in food tampering cases.

In the Commissioner's testimony, he said that FDA seeks not to inhibit the transfer of technology, but to promote it. He stressed that, "In order to do so, we must continue to stress developing an excellent science base and applied research program so that we can encourage that transfer and in so doing perform our mission to promote public health." We agree with that.

In comparing last year's budget to this year's administration request, we see that the bulk of the increase goes for a pay raise and the cost of inflation. When you look at the actual programs, the agency's food-related activities are only receiving an additional $2 million. Considering the size of the task faced by FDA and the damage done by 10 years of budgetary neglect in the food area, this is hardly sufficient.

In summary, we ask that the committee take action to insure that the FDA's food-related activities are funded at a level commensurate with the importance of these functions. As we have stressed since we began arguing this issue early last year, no one is more concerned about the confidence of the public in the food supply than the food processing industry itself.

It is also critical that we are able to respond to consumer demands for new and innovative products in a timely fashion. This is why we have chosen to actively work in support of the food-related programs of the Food and Drug Administration and we hope the committee will be supportive as well.

We appreciate the opportunity to appear before you today.

Senator BURDICK. Mr. Graham, your comments about FDA's ability to respond to the growing number of food tampering cases, I discussed this issue with Commissioner Young earlier. He has concern about the strain placed on the FDA staff resources in emergency situations such as tampering. Do you think that FDA's proposal to add 20 full-time staff to the food safety activity is sufficient to carry out the number of inspections?

Mr. GRAHAM. I don't believe that the 20 additional staff will be in the food tampering area. I think that they will be spread among a number of different programs. We would say that this is certainly a good first step, and it does begin to reverse this trend on the food side. It is a good beginning.

On the matter of tampering, it depends on how many such incidents are likely to happen. FDA does a very good job. I think it saved the health of many food companies by the appropriate action. We believe that they need the contingency fund. We know that the contingency fund was the main source of funding for the program last year.

Senator BURDICK. Thank you very much.

[The statement follows:]

STATEMENT OF CHARLES J. CAREY, PRESIDENT, NATIONAL FOOD PROCESSORS ASSOCIATION

Mr. Chairman and members of the Committee, I am Charles J. Carey, President for the National Food Processors Association (NFPA). NFPA represents about 600 member companies that pack processed-prepared fruits, vegetables, meats, fish and specialty products including canned, frozen, dehydrated, pickled and other preserved food items. Also included among the association's members are companies that provide equipment, supplies and services to the food processing industry. NFPA also operates three food research laboratories with over 100 employees conducting studies on food safety, nutrients and innovative technologies.

The members of NFPA appreciate having the opportunity to express their support for adequate funding for the food programs of the Food and Drug Administration. When the membership decided to begin this effort in support of FDA last year they realized that it would likely take several years to see any results. That is why we are back again this year and why we will continue to work with this Committee and your colleagues in the House to see that the food science capabilities of FDA are rebuilt. I use the term rebuilt because we are trying to reverse a ten-year trend of erosion of the food technology functions of FDA. This erosion has taken place in all the critical areas: personnel, dollars and facilities.

We are pleased to say that the FY 1987 current budget helped to stop the bleeding in that the food programs of FDA received a slight increase over the figures in fiscal year 1986. The Association thanks the Committee for its recognition of the problem. However, the budget submitted for fiscal year 1988 does not really reverse the budgetary decline in any meaningful way. The fact is that if the Administration request is approved with no increase the FDA will continue to suffer from a severe lack of resources in the food science area. I believe that the harmful effects of ten years of neglect of FDA's food programs were well documented last year, but let me take just a moment to summarize them.

In the area of facilities and personnel, more and more of the laboratory equipment at the Center for Food Safety and Applied Nutrition is becoming obsolete, and the Center is finding it increasingly difficult to attract and retain young, talented food scientists and technicians to work in its labs. In fact, the staff of our own NFPA laboratories, who work on a close, daily basis with FDA personnel, tell us that the rate of turnover at FDA seems to be increasing.

The ability of the FDA staff to keep up with technological innovations in the industry is also eroding. This lack of familiarity with new processing and packaging techniques has a negative economic impact on the industry. The new products, packaging materials and systems being developed by industry not only respond to consumer interests but are frequently designed as the solution to an existing problem. It is essential that adequate FDA resources be available to examine new product and packaging petitions. We were therefore pleased to learn that the FDA Commissioner, Dr. Frank Young, plans to allocate more personnel and resources to the office which handles new product approvals in order to expedite industry applications. We hope the Committee will support this FDA proposal.

FDA's import inspection program has been unable to keep up with the growing volume of both raw and finished foodstuffs which are pouring into the United States. This problem was extensively outlined by the General Accounting Office in a recent report which I know the members of the Committee are familiar with. There is a continuing need to provide sufficient examination of imports to assure that such products meet the same standards of safety and wholesomeness required of domestic production.

An ever present problem, of major importance, is the intrusion of various state laws and regulations into matters that should be uniformly administered at the national level. Any abdication of authority by FDA quickly leads to a proliferation of politically inspired actions at the state level--at great cost to both industry and consumers. Proposition 65 in California is a prime example of this. In effect, what the state has said is that it wants to be the governmental entity to regulate various aspects of the safety of the food supply and therefore the state may impose its own regulations on the food industry. Unfortunately, the manner in which this has been approached in California could result in massive labeling, advertising and distribution problems for virtually all national food marketers. NFPA has taken it upon ourselves as an association to go to California and work with state officials to try to minimize the impact of this new law, but the fact remains that this trend toward states setting independent standards which conflict with federal regulations is expanding. This situation presents a threat to our national system of food production and distribution and the resulting cost to the public could be very high.

Another very important area of FDA responsibility has to do with the need for a prompt, professional response to the growing number of food tampering cases. The food industry is doing what it can to tamper-proof the food supply through the use of innovative packaging, but the public's confidence in the general safety of the food supply will most certainly be lessened without an authoritative, government response to these incidents. We believe that the FDA has done an excellent job so far in handling this situation, but this has been accomplished at great cost in terms of time, manpower and resources. The other food related responsibilities of FDA suffer each time there is a tampering incident and staff must be diverted from their everyday tasks in order to respond.

While preparing my testimony I had an opportunity to review FDA Commissioner Young's March 19, 1987 testimony before the House Appropriations Committee. He made some interesting points regarding FDA's food programs and I would like to make a few comments in reaction to this statement.

In discussing FDA's role in reviewing new drug applications the Commissioner said that the FDA is working with the Institute of Medicine, the National Institutes of Health, the American Medical Association, and the Pharmaceutical Manufacturers Association to recruit additional staff because of the increased workload (page 4). While we applaud this effort to provide better service with regard to drug, we suggest that a similar effort must be undertaken in the food area. NFPA has extensive relationships with a variety of academic and other food science institutions and we would be very pleased to assist the agency in finding and recruiting additional staff for the Agency's food programs.

In discussing what he quite correctly terms a "technological explosion" in food processing the Commissioner states, and I quote, "FDA seeks not to inhibit this transfer of technology but to promote it..." He goes on to say that, "In order to do so, we will continue to stress developing an excellent science base and applied research program so that we can encourage that transfer and in doing so perform our mission to promote the public health." (page 22).

Mr. Chairman, numerous executives from the food industry have met with the Commissioner and have encouraged him to pursue this exact goal. Therefore, we are encouraged to hear him state this as a basic tenet of the agency. We hope that the Committee shares the Commissioner's view and will provide him with the resources necessary to carry out his mission.

In comparing last year's budget to this year's Administration request we see that the bulk of the increase goes for a payraise and the cost of inflation. When you look at the actual programs, the agency's food related activities are only receiving an additional 2 million dollars. Considering the size of the task faced by FDA and the damage done by ten years of budgetary neglect in the food area, this is hardly sufficient.

In summary,we ask that the Committee take action to insure that the FDA's food related activities are funded at a level commensurate with the importance of these functions. As we have stressed since we began arguing this issue early last year, no one is more concerned about the confidence of the public in the food supply than the food processing industry itself. It is also critical that we are able to respond to consumer demands for new and innovative products in a timely fashion. This is why we have chosen to actively work in support of the food related programs of the Food and Drug Administration and we hope the Committee will be supportive as well.

Mr. Chairman, while I have the opportunity I would like to take just a moment to comment on other programs under the Subcommittee's jurisdiction.

In order to meet the future needs for trained graduates in the food and agricultural sciences, NFPA strongly urges continued support for the Cooperative State Research Service (CSRS). This program not only produces scientists with strong backgrounds in biology, chemistry, physics, biochemistry, microbiology, nutrition and related fields, it also provides important research into new technologies.

In 1986, the Cooperative Research Grant program funded 415 studies for $40 million. The FY 1988 budget proposal calls for a 9.5 percent increase over FY 1987 levels. This increased funding will greatly enhance basic research in plant sciences including value-added technologies. CSRS research in biotechnology is rapidly revolutionizing crop production. Genetic engineering should significantly advance the farmer's ability to increase yields and produce crops with specific characteristics, such as peach trees which bare fruit later in order to avoid early frosts.

Of primary concern to NFPA members are the CSRS pesticide and drug clearance programs administered by Inter-Regional Project No. 4 (IR-4). The IR-4 project provides the necessary field residue studies which support pesticide applications for minor use crops. Since practically every crop grown for the fresh and processing markets is considered to be a minor crop by pesticide manufacturers, IR-4 project data is critical in seeking EPA establishment of the pesticide tolerances necessary for a pesticide to be used on a food crop. Without IR-4, very few new toleranccs will be established for minor crops and the damage to both agriculture and processing will be severe.

Finally, NFPA supports full funding for the Agricultural Research Service (ARS). ARS is instrumental in providing research in biotechnology; development of crop protection agents utilizing safer chemicals; new disposal methods for unneeded or used pesticides; value-added technologies for utilizing surplus crops; methods for reducing post-harvest losses due to pests or handling damage; and control of the spread of pests through importation.

I would, however, like to highlight one area of research critical to some of our members. The FDA has over the past year been involved in a number of recalls of dairy products found to be contaminated with Listeria. Listeria is a microorganism which is potentially pathogenic to a small portion of our population: immuno compromised individuals and pregnant women and their fetuses. Several weeks ago, the Food Safety and Inspection Service (FSIS) of the USDA announced its intention to immediately increase its testing for Listeria, especially in cooked and ready-to-eat meat and poultry products. Prior to this announcement, FSIS had made an urgent request of ARS to develop information on Listeria and other microorganisms of potential concern. Despite ongoing efforts by the industry to address this issue, the potential exists for disruption of segments of the meat and poultry industry due to the lack of knowledge about this pathogen. Because of the seriousness of this situation NFPA supports the funding necessary to permit ARS to carry out this basic research. At the same time, we encourage ARS to collaborate with other researchers, including those at our own laboratory, so that duplication of effort is minimized.

Thank you for the opportunity to appear.

CENTER FOR SCIENCE IN THE PUBLIC INTEREST

STATEMENT OF MITCHELL ZELLER, ASSISTANT DIRECTOR, LEGAL AFFAIRS

ACCOMPANIED BY CHARLES MITCHELL, STAFF ATTORNEY

Senator BURDICK. Our next witness will be Mr. Mitchell Zeller, assistant director of legal affairs for the Center for Science in the Public Interest, and he is accompanied by Mr. Charles Mitchell, staff attorney.

You may proceed.

Mr. ZELLER. Thank you, Mr. Chairman. I am Mitch Zeller, and I am assistant director for legal services for the Center for Science in the Public Interest. With me is Charles Mitchell.

It is not every day that CSPI and the National Food Processors Association are on the same side of the issue, but we both share a very grave concern about the quality and pace with which the Food and Drug Administration responds to food problems in general, and safety problems in particular.

It is not the consumer that you are hearing from on these types of general concerns about FDA's ability to respond to safety problems. I think that it is very telling and a sad commentary on the FDA's performance and the Reagan administration that you have a major food industry trade association sounding very much like a consumer group coming to Congress, saying, we need your help, FDA is not doing the job that it should be.

I would like to thank you and your staff for your concern about our issues in particular. I would like to discuss briefly two issues that are of concern to CSPI. The first issue is sulfites.

A quick background—sulfites are widely used as preservatives in the food and drug supplies. There have been reports of more than 20 deaths. FDA has confirmed about 13 of them. Sulfites are the only food additives to cause death in the last 25 years. The last time there was a killer food additive was in 1960, and FDA moved rather quickly to get rid of it. It was called sulfate, but they haven't done the same for sulfites.

Congress has been on record since 1983 expressing concern about FDA's handling of sulfites. Under Senator Cochran's leadership there was report language in 1983 and 1984 expressing concern over FDA's handling of sulfites. In 1985, there was an amendment for the FDA to take certain action by June 1, 1986. Congress has sent a clear signal to the administration that it is concerned about the way this particular food safety program is being handled.

When we testified last year, we expressed grave doubts that FDA would be able to meet Congress' June 1 deadline for action on sulfites. Sadly, I must report to you today that our prediction came true. FDA told Congress just a month after June 1 last year that action was imminent. Today, more than 10 months have passed since June 1, 1986, and FDA still has not taken any of the action that was ordered last year. Needless to say that we are not holding our breath.

FDA has issued one rule that addresses part of the sulfite problem. Last summer, in response to a mounting death toll and intense pressure from Congress, FDA banned sulfites from fresh fruits and vegetables. That was an important first step, but a lot still needs to be done.

We have confirmed deaths from sulfites in fruits and vegetables, and a series of reactions. FDA's flagrant refusal to honor Congress' deadline for action on sulfites reflects the callous and insensitive attitude generally toward its responsibilities of protecting the public from harmful ingredients in the food supply. Perhaps it will manage to get the rules published by the end of this calendar year.

The second issue that I would like to testify on today concerns urethane, a potent carcinogen that is used in wine and spirits at present at very high levels, up to 10 and 20 percent in wine and spirits.

We petitioned FDA last November for action on urethane, and there has been no response. Both FDA and the Canadian public health officials learned of the urethane problem a year-and-a-half ago. Canada established limits on urethane, and recalled the contaminated product within 1 month of learning of the problem. What has FDA done, a year-and-a-half later? Virtually nothing. They failed to establish limits, and they failed to recall products.

What should the agency be doing? Three things. First, they should call for a recall of the products that are highly contaminated. Second, they should inform the public of the levels in products that are already known. Third, they should institute systematic and comprehensive testing so that we know just how widespread the presence of urethane is in wine and spirits.

What is FDA doing instead? In the best tradition of the bureaucratic buck passing, FDA has thrown its hands up in the air, and asking industry to study the problem so that levels can be brought down in future production. It is well-intentioned, and it is a good first step, but it does nothing about wines and spirits that are marketed today that may contain high levels of urethane.

We are asking the subcommittee to make funds available to FDA to complete the systematic and comprehensive testing that is needed for a determination of how widespread the problem is. We hope that you will be sensitive to that request.

Thank you.

Senator BURDICK. When Commissioner Young testified before the committee last week, he seemed confident that FDA would be issuing final regulations on the sulfites in potatoes in the next few weeks. Should we be satisfied with that?

Mr. ZELLER. I would like to be able to believe the Commissioner. Last July, he told Senator Gore that this same potato rule was coming out within a matter of days or weeks. This is what he told Senator Gore last July, and we are still waiting to see what comes out. It will not be the final rule, it will be a proposal, and FDA will still have to go through the notice of rulemaking before it goes final rule. We have asked that the rulemaking proceeding be completed by the end of the year. As I said in my remarks, I am not holding my breath. I don't think that the Commissioner is being truthful because this is the very same thing that he told Senator Gore last July.

Senator BURDICK. We will have to see what the committee can do about the enforcement. This is something that has to be done in the authorizing committee.

Mr. ZELLER. We are not talking about a lot of money, it is just a matter of moving things through the pipeline. There was language in the 1986 appropriations bill for certain action to be taken by June 1, 1986. I think that it would be an appropriate next step for you to have bill language that says that since they didn't meet the 1986 deadline, the rulemaking should be completed by the end of calendar year 1987.

Senator BURDICK. We can't do legislation in the appropriations bill.

Mr. ZELLER. This would not be legislation, Mr. Chairman. Congress wouldn't be saying, "Ban this use." It is simply saying, "Make up your mind by the end of the year." Congress is not taking any substantive position on whether sulfites should be banned, or whether certain uses should be permitted.

Thank you.

[The statement follows:]

STATEMENT OF MITCHELL ZELLER

Good morning. My name is Mitchell Zeller. I am the Assistant Director for Legal Affairs with the Center for Science in the Public Interest. With me today is CSPI staff attorney Charles Mitchell. The Center for Science in the Public Interest is a non-profit consumer organization which specializes in food, nutrition and related matters. CSPI was founded in 1971 and is now supported by approximately 80,000 members.

Today I would like to discuss two regulatory matters pending before the Food and Drug Administration (FDA) with which CSPI has been actively involved -- the "GRAS" Review of food additives, and the need for action by FDA to protect consumers from alcoholic beverages contaminated with urethane, a known carcinogen. We believe our experience with FDA on these issues suggests that a reallocation of budgetary resources together with a reordering of agency priorities is desperately needed.

1. FDA's Safety Review of Food Additives

Sulfiting agents are a group of food and drug preservatives that have killed at least thirteen persons and caused many other life-threatening reactions. The thirteen deaths resulted from reactions to sulfite-treated restaurant food. Since 1970, FDA has been reviewing the safety of all food ingredients, such as sulfites, that were previously considered Generally Recognized As Safe or "GRAS." In July 1982, as part as what is known as the GRAS Review, FDA issued a proposed rule affirming sulfites as safe for use in food.

FDA based its proposal to affirm sulfites as safe on a scientific literature survey completed in 1976. At no time between 1976 and 1982 did anyone at FDA update the literature search. In October 1982, my organization, the Center for Science in the Public Interest, petitioned FDA to ban or severely restrict the use of sulfiting agents. We took this actions after discovering numerous studies published between 1976 and 1982 which demonstrated that sulfites pose a life-threatening health hazard to asthmatics and other sensitive individuals.

Since our petition, the deaths of at least thirteen persons have been linked to reactions to sulfite-treated restaurant food. All told, FDA has received reports of more than twenty sulfite-related deaths that are under investigation. Hundreds of other sulfite-sensitive consumers have suffered reactions ranging from mild skin rashes to life-threatening anaphylaxis, coma, and brain damage.

Congress has indicated its concern over FDA's handling of the safety review of sulfites. In the report accompanying the FDA appropriations bill for Fiscal Year 1984 this Committee stated that it was "concerned about the quality and pace of FDA's safety evaluation of sulfites," and urged FDA to "set aside whatever funds and staff resources are necessary to publish a final rule governing the use of these agents by the end of 1985." S. Rep. 98-160, 98th Cong., 1st Sess., p. 104.

In the report accompanying the Fiscal Year 1985 appropriations bill this committee again expressed concern about FDA's failure to expedite the sulfite safety review. The committee noted that FDA had taken certain actions during Fiscal Year 1984 that made it appear unlikely that the agency could meet the deadline for a final rule established by the committee. S. Rep. 98-566, 98th Cong., 2nd Sess., p. 123.

In 1985, concerned about continued foot-dragging by FDA, the House of Representatives agreed to a Senate amendment to the FDA Fiscal Year 1986 appropriations bill that required FDA to complete the safety evaluation of sulfites by June 1, 1986. P.L. 99-190, Section 101(a), referencing H. Conf. Rep. 99-439, Amendment No. 81, 99th Cong., 1st Sess. (1985). See 131 Cong. Rec. 13322-27, 13333 (October 16, 1985).

Last year, when we testified before this committee, we expressed grave doubts that FDA would meet Congress' deadline, given the agency's poor track record on sulfites. Sadly, I must report to you that our prediction came true. Today, more than ten months have passed since June 1, 1986, and FDA still has not taken any of the actions on sulfites that Congress ordered be done. FDA's flagrant refusal to honor Congress' deadline for action on sulfites reflects the agency's callous and insensitive attitude towards its responsibility to protect the public from harmful ingredients in the food supply.

FDA has issued one rule that addresses part of the sulfite problem. In July, 1986, in response to a mounting death toll and intense pressure from Congress, FDA banned sulfites from fresh fruits and vegetables. 51 Fed. Reg. 25,012 (July 9, 1986). That rule is only a first step. Many other uses of sulfites are capable of causing death and life-threatening reactions. Yet, FDA has failed to take any action to restrict any other uses of sulfites.

FDA continues to receive reports of sulfite deaths from foods unaffected by the ban on fresh fruits and vegetables. The deaths were caused by sulfite-treated potatoes and white wine -- uses that remain legal today.[1] Given the fact that there are several sulfite-free processed potato products (Ore Ida Tater Tots, Hash Browns, and Golden Patties) and at least one wine (Walthari) that contains no added sulfites, there appears to be no practical reason why a ban on the addition of sulfites to these foods cannot be ordered.

Furthermore, by FDA's own account, less than half of the consumer complaints filed with the agency since 1982 concerned fresh fruits and vegetables. Nearly 30 percent of the cases involved wine, beer, or processed food eaten at home. 50 Fed. Reg. 32,832. Only half of the sulfite deaths confirmed by FDA involved fresh fruits and vegetables. In addition, only 40 percent of the non-fatal reactions investigated by FDA and classified as "serious" involved fresh fruits and vegetables.

We also note that FDA has failed to address concerns raised by its own expert advisory committee. In 1985, the Federation of American Societies for Experimental Biology (FASEB), under contract to FDA to study sulfites, found that the following foods contained "high" levels of sulfites -- wine, shrimp, "instant" potatoes, dried apricots, and "tossed salad."[2] With the exception of tossed salad, none of the foods identified by FASEB as containing high levels of sulfites are affected by FDA's ban on fresh fruits and vegetables.

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[1] Food Chemical News, August 18, 1986, p. 2 (reporting on three deaths in mid-1986 under review by FDA); "2 More Deaths Linked to Sulfite in Food Are Under Scrutiny," The New York Times, September 5, 1985, p. 18.

[2] Select Committee on GRAS Substances, "The Reevaluation of the GRAS Status of Sulfiting Agents," Life Sciences Research Office, Federation of American Societies for Experimental Biology, January 28, 1985, p. 29. See 50 Fed. Reg. 32,832. These items are by no means the only food that contain high levels of sulfites. FASEB only used them as examples of foods with high residual levels of sulfites.

Even a spokesman for the food industry has acknowledged that the majority of uses of sulfites will continue unabated. Richard E. Cristol, deputy director of the Food Additive Council, stated that the ban on fresh fruits and vegetables "would have very little economic effect...Most of the volume [of sulfites] goes in processed food, such as dried fruit and frozen potato products."[3]

We urge this committee to maintain its vigilant watch over FDA by including bill language that requires FDA to publish final rules on sulfites by the end of calendar year 1987. Hopefully, this action will put the agency back on track. We fear that without continued prodding from Congress, FDA will fail to respond in a meaningful way to the hazards posed by sulfites.

2. Urethane in Alcoholic Beverages

Last November, CSPI petitioned FDA to regulate wines and liquors contaminated with urethane. Urethane is a potent animal carcinogen and presumed human carcinogen that forms in high levels during the fermentation and distillation of some wines and liquors. We bring this matter to the Committee's attention because FDA's response to our petition to date shows that the agency is unwilling to squarely address this serious cancer risk.

At the time we petitioned, FDA had known about the urethane problem for a full year. During that year FDA had tested about 250 of the many thousands of wines and liquors sold in the United States. Roughly one of every five products tested for urethane exceeded limits set by Canada in 1985. Yet FDA has still failed to set limits on the amount of urethane that can be in alcoholic beverages sold in the country, to recall contaminated products, or even to alert the public as to which brands are the most highly contaminated. By contrast, only one month after learning of the problem in November, 1985, Canada had already established limits on urethane contamination, and had recalled highly-contaminated wines and spirits.

FDA believes that some urethane contamination may be inevitable. The agency has informed us that it thus hopes to set limits pursuant to Section 406 of the Food, Drug, and Cosmetic Act based on the amounts that are unavoidable by good manufacturing practice. FDA, however, claims it cannot set those limits until ongoing industry research determines the source of urethane contamination and methods of reducing it.

In a November, 1986 letter, FDA told the Distilled Spirits Council of the United States (DISCUS) that it expected the trade association to be in a position "in early 1987" to provide a date for completing plant modifications to reduce urethane levels. However, in their most recent report to FDA (February 13, 1987), DISCUS provided no such date, conceded that they have found "no clear solution," and claimed that no single change in production methods is likely to significantly reduce urethane levels. The wine industry has likewise failed to identify a solution to the urethane contamination problem. Thus, FDA cannot even estimate when it might be able to implement the regulatory action it hoped to take.

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[3] "U.S. Moves to Ban 6 Preservatives From Fresh Fruits and Vegetables," The New York Times, August 10, 1985, p. 8 [emphasis added].

One thing is clear, however -- the cancer risk posed by the most contaminated products known to FDA is avoidable. These wines and liquors contain urethane in amounts that, over a lifetime, may present risks of up to 5,000 cancer cases per million regular, moderate drinkers of such products (1 case of cancer in every 200 such drinkers). Many other products that were tested contained only trace or undetectable amounts. While industry seeks a long-term solution, FDA should protect consumers by initiating recalls of contaminated products and officially inform the public of known urethane levels so that consumers can decide for themselves whether they wish to risk drinking highly contaminated beverages.

FDA's insistence on delaying action until the alcoholic beverage industry conducts further research represents a marked departure from the manner in which it and other regulatory agencies have dealt with similar problems in the past. In 1979, after we petitioned FDA for action against beers contaminated with cancer-causing nitrosamines, the agency publicized the amounts it had detected in various beers, thus allowing the public to choose the safest brands. Similarly, after discovering the presence of poisonous diethylene glycol in wines, the Bureau of Alcohol, Tobacco, and Firearms publicized the quantities found in different brands.

Furthermore, FDA in the past has not insisted on identifying the technical means of reducing contamination in food before taking action to protect the public. For example, FDA established action levels for aflatoxins (another group of carcinogens) and polychlorinated biphenyls (which pose a variety of health hazards) even though the agency knew of no practical methods for reducing contamination levels. Instead, FDA determined what percentage of the food supply it was economically feasible to sacrifice in order to protect the public from unreasonable health risks. Because no technical solution to urethane contamination is imminent, FDA should treat this problem in the same manner.

In order to undertake the approach we suggest, FDA must systematically test a representative sample of the alcoholic beverage supply so that the agency can estimate the severity of consumer exposure to urethane and the economic consequences of recalling contaminated beverages that exceed safe limits. The limited testing conducted by the agency so far fails to provide a sound profile of industry-wide urethane levels.

Because FDA refuses to undertake the necessary testing, we urge the sub-committee to include language in the agency's appropriations bill directing FDA to allocate resources to urethane testing sufficient to enable it to set action levels and conduct recalls of products exceeding those limits by January 1, 1988. The test results will also enable FDA to alert the public on an interim basis of the extent of urethane contamination in wines and liquors. In this way, consumers will receive the information they need to decide how much of a cancer risk they are willing to accept pending establishment of action levels by FDA.

Only FDA's lack of resolve stands in the way of recalling seriously contaminated beverages, setting safe limits, and alerting the public to highly contaminated products. We hope this Subcommittee will direct FDA to take the action that its statutory mandate obligates it to pursue.

We would like to thank the Subcommittee for this opportunity to testify and would be happy to answer any questions.

PENNSYLVANIA ASSOCIATION OF CONSERVATION DISTRICTS DIRECTORS, INC.

STATEMENT OF FRANK MALINZAK, PRESIDENT

Senator BURDICK. Our next witness is Mr. Frank Malinzak, president of the Pennsylvania Association of Conservation Districts.

The Honorable Arlen Specter was going to be present to introduce you, but I understand that he is in another hearing. However, I would ask that his introduction of you be made a part of the record at this point.

[The introduction follows:]

INTRODUCTION BY SENATOR SPECTER

It is my privilege to introduce to the subcommittee today Mr. Frank Malinzak, president of the Pennsylvania Association of Conservation District Directors, who will be testifying on the urgent need to fund the Soil Conservation Service [SCS] at adequate levels in fiscal year 1988.

Mr. Malinzak is a native of Uniontown, PA. He served in the Pennsylvania House of Representatives in the 1960's, and is currently a real estate salesman in Harrisburg.

As you know, Mr. Chairman, the conservation provisions of the 1985 farm bill have placed a great deal of responsibility in the SCS, especially in implementing the sodbuster and swampbuster programs.

I am hopeful that Mr. Malinzak's testimony will provide some useful insight into Pennsylvania's and the nation's conservation funding needs.

Mr. MALINZAK. Good morning, Mr. Chairman, and other members of the Subcommittee on Agriculture, Rural Development, and Related Agencies.

My name is Frank Malinzak, and I am president of the Pennsylvania Association of Conservation Districts Directors, Inc. On behalf of the association, I wish to thank you for this opportunity to address serious concerns over funding proposals for soil and water conservation nationwide and, specifically, in Pennsylvania.

Our overriding concern is the timely implementation of the Food Security Act's conservation provisions—the sodbuster, swampbuster, conservation compliance, and conservation reserve program—without sacrificing the progress of established conservation programs, whether federal, state, or locally initiated.

At the time of the 1985 farm bill's passage, it was our understanding that new funds would be appropriated to help carry out these landmark conservation initiatives. In other words, sufficient technical personnel under the USDA's soil conservation service, which is the technical arm of the nation's conservation districts, would be funded to meet the deadlines set forth. Furthermore, funds for the agricultural conservation program, which is administered by the Agricultural Stabilization and Conservation Service, USDA, would be sustained.

Despite the promising start, the administration's proposed budget for fiscal year 1988 represents a "do more with less" attitude that does not reflect a full understanding of the local conservation team effort. In Pennsylvania, for example, the local conservation district teams are composed of county- and state-employed managers and technicians who work side by side with SCS to meet the following program responsibilities:

One: Baseline technical assistance for farm conservation plan development and implementation;

Two: Pennsylvania's Erosion and Sedimentation Control Program, which includes education, compliance efforts, aod enforcement responsibilities for all earth disturbance activities;

Three: Pennsylvania's Chesapeake Bay Program, which lends technical and cost-sharing assistance to landowners in the Chesapeake Bay drainage basin, roughly one-half of Pennsylvania's land area;

Four: Abandoned mine land reclamation responsibilities through the Federal Rural Abandoned Mine Land Program, commonly called RAMP, and State Abandoned Mine Land Program;

Five: Intensive educational endeavors related to soil and water conservation, such as farm demonstration tours, winter workshops, and environmental education for our schools and agricultural youth groups.

Six: RC&D projects, resource conservation and development. We have five such project areas in Pennsylvania, working with the Middle Atlantic Association of Resource Conservation Districts, and the National Association of Conservation Districts;

Seven: Local watershed plans and projects.

All of these items are important, well-established workload areas that cannot simply be placed on hold for 3, 5 or 10 years while technical assistance is fully diverted to the FSA's conservation mandates. Such an approach threatens to permanently damage the public confidence conservation and in conservation districts that has taken years to develop. District directors receive no pay and have performed well since the origination of the conservation effort 50 years ago.

Pennsylvania's conservation needs—the proposed fiscal year 1988 budget for SCS would have a major detrimental impact on Pennsylvania's conservation work.

Specifically, the number of SCS full-time personnel would be reduced by approximately 44 positions. This loss is in addition to the 45 already lost since October 1984. In addition, between 10 to 15 field offices and one area office would be closed.

How would these reductions affect conservation in Pennsylvania? The following figures are examples of the unfinished work in 1 year:

One: 400,000 tons of soil saved;

Two: 62,000 acres of conservation plans;

Three: 6,200 individuals seeking SCS technical help;

Four: 46 agricultural waste systems;

Five: 11,700 acres of conservation cropping systems;

Six: 118,900 feet of diversions;

Seven: 132 acres of waterways;

Eight: 158 water control structures;

Nine: 23 agricultural storage ponds.

In addition to these basic conservation program reductions, the following work would also be lost under the proposed budget: Forty RC&D plans and 10 RC&D projects; 20 RAMP plans and 12 RAMP contracts; 43 land treatment watershed contracts; and 3 structural watershed dams estimated at $10.7 million at the present time.

Furthermore, SCS provides critical technical support to districts in state-delegated programs. SCS provides nine man-years of technical support for the more complicated reviews of erosion control plan under Pennsylvania's erosion and sedimentation control program.

SCS also supports the technical demands of the Chesapeake Bay program, which heavily emphasizes nutrient management programs for farmers in a 13-county area of the Susquehanna River Basin. This $4 million program continues to expand throughout the Susquehanna River Basin, placing additional technical demands on SCS technicians.

Chairman Burdick, as you and your staff are certainly aware of how critical our needs are, and how critical they continue to get.

Of relevance to the new FSA conservation programs are the 3.7 million acres of cropland in Pennsylvania that are highly erodible and, therefore, subject to conservation reserve, conservation compliance, and sodbuster programs. Approximately one-half of this acreage, or 1.8 million acres, is not covered by a conservation plan. Out of Pennsylvania's total cropland base of 5.9 million acres, 58 percent or 3.4 million acres still need adequate conservation treatment.

However you look at the need for conservation planning, over 3 million acres of cropland in Pennsylvania will require either a review or revision of a current plan or the development of a new conservation plan. With an average size farm of 149 acres, the potential exists to have over 24,000 farms or nearly one-half of our total 58,000 farms in need of conservation plan revisions or design work. It is estimated that 50 additional SCS field positions in Pennsylvania are needed to meet this need for technical guidance.

In regard to the Agricultural Stabilization and Conservation Service of USDA, better known as ASCS, funds for its cost-sharing program known as the Agricultural Conservation Program, or ACP, are important to maintain. The ACP program helps farmers afford conservation practices that must now be employed on highly erodible land in order to maintain federal farm program payments.

According to ASCS officials, approximately 12,000 participants in Pennsylvania are enrolled in the feed, grain, and wheat programs and, therefore, subject to sodbuster compliance. In reality, this number represents only one-half to one-third the number of farm operations in Pennsylvania subject to sodbuster since many program participants own multiple farms.

All of these farms must comply with sodbuster immediately and have a complete conservation plan for their entire acreage by 1990, with full implementation by 1995. The magnitude of updating old plans and developing new plans for these farmers places immediate pressures on both ASCS and SCS personnel, not to mention the district people. This is where it all starts.

In closing, I would like to point to a report by the Soil Erosion and Sedimentation Task Force under the Great Lakes Basin Commission, which estimates that 40 percent of the SCS technical assistance in 1987 will be devoted to implementing the new Food Security Act. In 1988, 60 percent of SCS's technical manpower will be so directed. The Reagan administration has further instructed SCS to direct its entire technical support toward implementing the federal farm bill programs for at least the next 3 years.

Considering the above implications for Pennsylvania, and similarly for the nation at large, can we afford to allow this diversion of technical manpower at the expense of companion conservation programs?

Is it responsible to ignore the billions of dollars spent each year to clean up sediment in municipal water systems, recreation areas, and navigation channels?

Can we ignore the economic benefits that ultimately result from reclaimed mine lands and rural community development projects?

We think not.

PACDD, Pennsylvania Association of Conservation District Directors does not believe that you can rightfully divorce the new conservation initiatives from the maintenance of current base programs. We respectfully recommend that SCS be funded at a level of $746 million for fiscal year 1988 as proposed by our National Association of Conservation Districts.

We also support a funding level of $220.4 million for the farm assistance and forestry incentive programs administered by the Agricultural Stabilization and Conservation Service of USDA.

Mr. Chairman, I certainly appreciate the time that you have kindly given me to appear before your committee today to ask for your help.

Senator BURDICK. Thank you.

SUBCOMMITTEE RECESS

This concludes this morning's hearing. We greatly appreciate your having been here to offer testimony and to help us with the task of providing funding for the Department of Agriculture and related agencies.

We will continue these hearings this afternoon beginning at 2 p.m., in the same room.

[Whereupon, at 11:35 a.m., Tuesday, April 7, the subcommittee was recessed, to reconvene at 2 p.m., the same day.]

(Afternoon Session, 2:09 p.m., Tuesday, April 7, 1987)

NONDEPARTMENTAL WITNESSES

SUBCOMMITTEE PROCEDURE

Members present: Senators Burdick, Sasser, Harkin, and Grassley.

Senator Burdick. The subcommittee will come to order.

Good afternoon, ladies and gentlemen. This afternoon, the subcommittee continues with its hearings of congressional and public witnesses. These hearings give members of the public an opportunity to comment on the budget for the Department of Agriculture and related agencies under the subcommittee's jurisdiction.

We welcome the comments that we receive. They will be helpful to us in determining the level of appropriations for these agencies.

I must remind the witnesses that the subcommittee cannot receive any copyrighted material for publication unless arrangements have been made in advance to obtain permission of the copyright owner that those materials be included in the hearing transcript. This notice is given to protect copyright owners, as well as the subcommittee and witnesses.

I also want to remind the witnesses that we have a large number of witnesses and, therefore, have to limit the time for testimony. The statements of each witness will be made part of the record in full. Therefore, you are asked to summarize your testimony if it is lengthy. Each witness will be allowed 5 minutes for oral comments and it will be appreciated if you keep your eye on the stoplight up here and comply with the limitation.

We will now proceed with the first witness, Mr. Charles Fox, director of the Chesapeake Bay Project, Environmental Policy Institute.

You may proceed, Mr. Fox.

Chesapeake Bay Project, Environmental Policy Institute

STATEMENT OF CHARLES FOX, DIRECTOR

Mr. Fox. My name is Charles Fox, and I am the director of the Chesapeake Bay Project for the Environmental Policy Institute. EPI was founded in 1972 to address every energy, environmental, and natural resource issue at local, national, and international levels.

We would like to thank you and other members of the subcommittee for your continued support of soil conservation programs, given these difficult fiscal times. Under your leadership, soil conservation has remained, as it should, a top national priority.

From the very beginning, we would like to make it clear that we join the host of witnesses who do not support the administration's proposed reductions in soil conservation. This country cannot afford to cut back on programs that go to the heart of our national well-being.

We would go further and express our opinion that the Soil Conservation Service should receive an increase over last year. Without a significant increase, the landmark conservation programs recently adopted by the Congress would not be able to be effectively implemented.

In our statement this afternoon, I would like to briefly explain the important role of soil conservation in the efforts to restore Chesapeake Bay. In the efforts on Chesapeake Bay, we believe there are important, emerging roles for use of soil conservation initiatives throughout the nation. In particular, we have come to see that both the SCS and the ASCS should assume a lead role in addressing these problems.

In response to the efforts of Senator Specter and members of this subcommittee, the SCS has committed $1.14 million for 31 positions in the Chesapeake Bay watershed, which, by the way, will not be maintained without another specific directive from the subcommittee.

These additional employees have joined forces with existing SCS staff and local and state employees in the Chesapeake watershed. These people are working quite effectively with farmers, conservation districts, and State governments in safeguarding and controlling excessive runoff.

As you probably know, Mr. Chairman, the so-called agricultural nonpoint source pollution has been established as one of the leading factors in the decline of the Chesapeake Bay. Runoff from farms, particularly in central Pennsylvania, had contributed pollutants and sediment to the Chesapeake. These pollutants have contributed to the loss of oxygen which, of course, is necessary to the important resources.

While the SCS assistance has proved extremely helpful in many different respects, other SCS activities, unfortunately, have not. In fact, some of the proposed activities, funded through the watershed operations account will actually undermine the Chesapeake cleanup effort.

One such project is the controversial Upper Chester River project in Maryland and Delaware which would have major adverse effects on water quality. This agricultural drainage project would involve over 300 miles of stream channelization, affecting over 3,000 acres of wetlands. Today, this project, just like the other one planned for southern Maryland, appears to have been stalled because of highly critical comments by the Environmental Protection Agency.

We believe that valuable lessons have been learned on the Chesapeake Bay. Across the nation, agricultural or related water pollution of ground and surface water has emerged as a top priority. Congress recently adopted a new Safe Drinking Water Act and the Clean Water Act, with new provisions to address agricultural pollution. We believe that USDA plays an important role in this area.

Specifically, there are a number of modest initiatives that should be taken. First, the subcommittee should direct the USDA to step up its evaluations of so-called best management practices, which are promoted to improve water quality. We have painfully learned, in the Chesapeake, that much more is needed in this area.

Second, the subcommittee should direct the SCS to terminate those watershed projects with major adverse impact on the water quality and the environment. USDA, we believe, should be more active in promoting projects that enhance our natural resources.

Finally, the subcommittee should consider various options to maximize water quality benefits in the Conservation Reserve Program. Currently, the Chesapeake watershed states, and other states, with significant agricultural pollution have not been leading participants in this area. Our written statement provides more detailed information on this subject.

Once again, Mr. Chairman, thank you for this opportunity.

Senator BURDICK. Thank you very much.

[The statement follows:]

STATEMENT OF CHARLES FOX

I am Charles Fox, Director of the Chesapeake Bay Project for the Environmental Policy Institute (EPI). EPI is a nonprofit, public interest organization engaged in research, public education, litigation and advocacy. Our work is directed at energy, environmental and natural resource issues at local, national and international levels.

We greatly appreciate the opportunity to appear here today and share our views on the FY 1988 budget for the U.S. Department of Agriculture (USDA). EPI's perspective is a unique one and, hopefully, a valuable one for this Subcommittee. For over twelve years, we have maintained an Agricultural Resources Project and a Water Resources Project. Three years ago, we launched our Chesapeake Bay and Ground Water Protection Projects. Through our collective work in these areas, we have become extremely familiar with USDA activities.

Our statement will address the activities of the Soil Conservation Service (SCS) and the Agricultural Stabilization and Conservation Service (ASCS) and focus on water quality and related environmental and public health concerns. As a revealing case study, we will include examples of USDA activities in the Chesapeake Bay restoration effort.

I. Overall Funding Levels

Mr. Chairman, we join the host of Democratic and Republican Members of Congress, farm and conservation organizations who believe that the Administration's request for the SCS and ASCS falls short in meeting pressing national needs. Indeed, the request by no means reflects Congressional intent in these vital program areas. In adopting the Food Security Act of 1985, Congress made it clear that the new Conservation Title XII was to supplement -- not replace -- existing conservation efforts. The new conservation programs -- namely, sodbuster, conservation compliance, conservation reserve, and swampbuster -- focus on unique, priority problems. Base SCS and ASCS programs, however, focus on all lands and serve to help solve a wide range of agricultural conservation and environmental problems.

Given the importance of these programs, EPI supports an increase above the FY 1987 appropriation for the SCS and ASCS sufficient to maintain existing activities and effectively implement new conservation responsibilities. However, we believe the Subcommittee could greatly enhance USDA efforts in water quality protection by redirecting key program areas.

II. Agricultural Threats to Water Quality and Public Health

A. Ground Water

Ground water constitutes 96 percent of all of the available fresh water in the United States and is the primary source of drinking water for half of the general population and 95 percent of the rural population. The most commonly found or suspected ground water pollutants are from agricultural sources, including nitrates (fertilizers), bacteria (animal wastes) and pesticides (herbicides and insecticides).[1]

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[1] Feliciano, Donald. "Agricultural Effects on Ground Water Quality." Congressional Research Service, Library of Congress. Washington, D.C. October, 1986.

A growing body of evidence suggests significant public health threats from agricultural-related sources. For example, a 1984 study by the U.S. Geological Survey with data from 124,000 wells found that 20% had nitrate levels believed to indicate agricultural contamination while 6% had levels exceeding Federal drinking water standards.

A 1986 study by the state of Iowa concluded that more than 20% of individual, rural resident wells had excessive nitrate pollution and traces of other, more dangerous farm chemicals. In California, a 1985 survey found 57 pesticides contaminating 2,887 wells.[2]

The Iowa Department of Natural Resources recently called groundwater protection "the state's number one environmental issue." Indeed, an Iowa state poll found that 86% of all Iowans now view groundwater contamination as a serious problem and, that 63% view agricultural chemicals as the cause.[3]

B. Surface Water

Agricultural-related contamination of surface waters is well documented. In the Chesapeake Bay, for example, agriculture contributes about half of the nutrients entering the Bay. Like many water bodies in the country, the Chesapeake suffers from nutrient enrichment or eutrophication. In the Chesapeake, dissolved oxygen levels have plummeted to dangerously low levels as a result of excessive nutrients. This, in turn, has contributed to dramatic losses of Chesapeake living resources.[4]

Nationwide, agricultural nonpoint source pollution problems are quite severe. A 1984 report by EPA concluded that six out of ten EPA Regional Offices view nonpoint source pollution as "the principal remaining cause of water quality problems." Agriculture, the report said, is "the most pervasive nonpoint source in every Region."[5]

III. SCS Watershed and Flood Prevention Operations

Under Public Laws 83-566 and 78-534, the SCS designs "works of improvement" for flood prevention, water conservation or utilization, erosion control, habitat improvement, and, in some cases, recreational purposes. In practice, such works of improvement involve impoundments, agricultural drainage, land treatment and other management techniques. In 1986 testimony, the SCS stated that there were 2,328 pending applications from local sponsors for watershed assistance under P.L. 83-566.[6]

EPI's experience in the Chesapeake Bay region suggests that some of the projects developed and implemented by the SCS under P.L. 83-566 have major adverse effects to water quality and the environment while providing few benefits to local landowners.

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[2] California Assembly Office of Research. "The Leaching Fields: A Nonpoint Threat to Ground Water." Sacramento, California. March, 1985.

[3] Harrison, Ross. "Iowa's Next Major Environmental Thrust." *Iowa Conservationist*. Department of Natural Resources. Des Moines, Iowa. February, 1987.

[4] U.S. Environmental Protection Agency. "Chesapeake Bay Program: A Framework for Action." Washington, D.C. September, 1983.

[5] U.S. Environmental Protection Agency. "Report to Congress: Nonpoint Source Pollution in the U.S." Washington, D.C. January, 1984.

[6] Subcommittee on Agriculture, Rural Development and Related Agencies, Committee on Appropriations, U.S. House of Representatives. Hearings on Fiscal Year 1987 Appropriations. March 11, 1986. Pages 457-467.

The controversial Upper Chester River Project on the Chesapeake's Eastern Shore is planned to involve over 300 miles of stream channelization, affecting over 3,000 acres of wetlands according to the U.S. Department of the Interior. As developed by the SCS, the Project will destroy habitat and exacerbate the precise water quality problems which have contributed to the decline of the Chester River and Chesapeake Bay. On the Chesapeake's Western Shore in St. Mary's County, Maryland, the SCS planned to install a large impoundment with major benefits devoted to increased water-based recreation.

Today, both of these projects appear to be stalled because of highly critical comments from the U.S. EPA Region III. Neither project, however, has yet been deauthorized or cancelled by the SCS to our knowledge.

In the Upper Potomac watershed, the SCS was widely criticized for its environmental negligence in carrying-out similar activities under its Emergency Watershed Protection Operations. In this case, the SCS destroyed a major trout fishery and other habitats on the North Fork of the Potomac. In addition, some parts of the River were actually re-channelized three different times because of inadequate stabilization of dredged material deposited directly on adjacent river banks.[7]

Beyond the Chesapeake Bay watershed, EPI is aware of similar concerns of SCS Watershed and Flood Prevention Operations in other regions of the country. Given these major adverse water quality and environmental impacts, EPI encourages the Subcommittee to specifically direct the SCS to eliminate projects with such adverse effects and focus greater attention to watershed projects aimed at erosion control, habitat restoration, water quality protection and land treatment. Ultimately, EPI would encourage Congress to amend P.L. 83-566 to provide more comprehensive attention to resource protection and enhancement.

IV. SCS & ASCS "Best" Management Practices

The SCS and ASCS provide technical and financial assistance to farmers and local communities to design and implement so-called "best management practices" (BMPs) to control erosion and minimize adverse impacts to water quality and the environment. Such practices are inherently site- and problem-specific and involve a host of different management techniques ranging from conservation tillage to integrated pest management.

On the Chesapeake Bay, serious questions have been raised regarding the effectiveness of certain BMPs. Vegetative filter strips, for example, are widely promoted by the SCS and ASCS to reduce sediment and phosphorus loads to local waterways. However, a recent study suggests that this common BMP may be mostly ineffective in many practical applications.[8]

The need to better evaluate BMP effectiveness is widely recognized in the Chesapeake Bay region.[9] At the national level, such an evaluation seems equally important. Throughout the country, legitimate questions have been raised about conservation tillage techniques which result in increased use of herbicides and insecticides. EPI encourages the Subcommittee to direct the SCS and ASCS to undertake a comprehensive review of BMPs and cost-share policies to enhance water quality benefits. Such a review should include a timely, annual report to Congress. Presently, USDA efforts in this area receive too little attention and resources.

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[7] letter to Rollin Swank, State Conservationist, Soil Conservation Service, Morgantown, West Virginia from U.S. Fish & Wildlife Service, April 17, 1986.

[8] Dillaha, T.A., Sherrard, J.H. etal. "Use of Vegetative Filter Strips to Minimize Sediment and Phosphorus Losses from Feedlots: Phase I. Experimental Plot Studies." Virginia Water Resources Research Center. Bulletin #151. April, 1986.

[9] See 1986 Review of Chesapeake Bay Initiatives, Chesapeake Bay Commission, Annapolis, Maryland or, U.S. Senate Committee on Governmental Affairs Report on the Future of the Chesapeake Bay, June 1986.

V. The Conservation Reserve Program (CRP)

As the Subcommittee is aware, Congress recently enacted the CRP to remove highly erodible lands from production, reduce surplus crop production and, among other stated benefits, improve water quality. In implementing this program, however, USDA has focused on surplus crop reduction and high erosion rate areas and, unfortunately, has not maximized benefits for the Chesapeake Bay region or other regions with major damage from soil erosion.

A recent study by USDA's Economic Research Service revealed that high erosion rate areas do not necessarily correspond with high offsite damage areas. Indeed, the study showed that the Northeast and Great Lakes regions have the lowest erosion rates but, by far, the highest costs associated with offsite nonpoint source pollution. Conversely, Western Mountain States and Northern Plains regions have high erosion rates but relatively small offsite damage costs.[10]

In the Chesapeake Bay region recent, as-yet-unpublished studies by the Chesapeake Bay Foundation (CBF) show that the states of Maryland, Pennsylvania and Virginia have extremely poor CRP participation rates. Indeed, compared to national participation averages, CBF concludes that the Bay states have, in effect, "lost" almost $30 million in conservation funds already. If current participation rates continue throughout the life of the program, "lost" funds would total hundreds of millions of dollars.

Obviously, there are many legitimate reasons for low CRP participation in the Chesapeake region and other areas with low erosion rates. However, as the CRP is currently being implemented, many water quality protection opportunities being lost throughout the nation. Current emphasis on erosion rates reflected in "t" values and, "sweeteners" for certain surplus crops, does not maximize benefits for the Program.

EPI advocates better balance for the Program. In some regions of the country, particularly the Northeast and Great Lakes areas, acceptable bid levels should probably be increased to better compensate for higher land values and larger offsite impacts. In addition, bonus payments should be considered for areas with major water quality benefits. Furthermore, USDA should more aggressively work with state governments to help them evaluate state-level initiatives which could enhance the effectiveness of the CRP.

EPI encourages the Subcommittee to direct USDA to enhance CRP participation in areas with high offsite damages. The Subcommittee should also direct USDA to evaluate and recommend various options to maximize CRP benefits to water quality. In addition, to maintain the long-term stability so essential to the success of the CRP, EPI encourages the Subcommittee to maintain funding through the Commodity Credit Corporation.

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[10] Ribaudo, Mark. "Reducing Soil Erosion: Offsite Benefits." U.S. Department of Agriculture, Economic Research Service, #561. Washington, D.C. September, 1986.

VI. Conclusions

New federal laws suggest major needs in protecting the quality of our nation's ground and surface waters. Late in the 99th Congress, the Safe Drinking Water Act was reauthorized with new ground water protection responsibilities for state and local governments. The 100th Congress adopted a new Clean Water Act with landmark provisions to control nonpoint sources of pollution to surface water. EPI believes that USDA has a vitally important -- but as yet unfilled -- role in helping farmers, local and state governments, and other federal agencies meet the objectives of these new laws.

The Federal government's long history in "point" source pollution control is unmatched in the "nonpoint" source arena. Agricultural activities in particular have contributed to a wide range of water quality, environmental, and public health problems. Throughout the country, surface waters have been contaminated as a result of nutrient and sediment runoff from agricultural lands. Simultaneously, ground water contamination from excessive use of fertilizers and pesticides has closed drinking water supplies and threatened public health in many parts of the nation.

EPI believes the Subcommittee should continue its support of key USDA programs which address these problems. Specifically, water quality initiatives like the Colorado River Basin Salinity Control Program and the Chesapeake-specific assistance from the SCS should be enhanced. Funding for base SCS and ASCS programs should be maintained. Additional funds necessary for implementation of the 1985 conservation programs should be provided. The Conservation Reserve Program should continue to be funded through the Commodity Credit Corporation.

In addition, SCS and ASCS programs should be redirected to better enhance water quality protection. The Subcommittee should direct USDA to eliminate Watershed and Flood Prevention Operations with major adverse impacts to water quality or the environment. Research on the effectiveness of "best management practices" should be greatly enhanced. The Conservation Reserve Program should be directed to yield greater water quality benefits.

Mr. Chairman, farmers and local communities deserve accurate, comprehensive and timely assistance from the USDA in their efforts to resolve these growing problems. It is our belief that our modest recommendations will help USDA meet this objective.

Thank you for the opportunity to present our views.

NATIONAL ORGANIZATION FOR RARE DISORDERS, INC.

STATEMENT OF DESIREE DODSON

Senator BURDICK. Mrs. D. Dodson, National Organization for Rare Disorders, Inc.

Mrs. DODSON. Mr. Chairman, members of the committee, we are grateful for the opportunity to talk to you today about the needs of 20 million Americans with orphan diseases, whose lives are touched by the Food and Drug Administration's Orphan Product Development Program, and in particular orphan drug research grants.

I am Desiree Dodson, the executive director of the American Porphyria Foundation, and a member of the board of directors of the National Organization for Rare Disorders, which represents 70 national voluntary health agencies who are concerned about more than 5,000 orphan diseases.

As you know, the Orphan Drug Act of 1983 authorized $4 million annually to fund extramural research grants on new therapies for rare diseases. This appropriation is needed to underwrite the expenses of clinical trials conducted by academic scientists who are developing new orphan therapies.

The products studied by these researchers usually do not have an industry sponsor. The government's support of small clinical research projects is absolutely essential because these initial tests are supposed to develop the data which is needed to attract a commercial sponsor. Without this seed money, many life saving therapies may never get to market.

The Agriculture Subcommittee has appropriated funds for this vital FDA research program since 1982, raising it by small increments annually. We are asking now that you appropriate the full $4 million for fiscal year 1988 which was authorized by the original Orphan Drug Act.

We want you to know that we understand the government's limitations, so we are trying to raise research donations from the public to supplement your appropriation, but this is a very difficult task. The $40,000 we have raised to date is a drop in the proverbial bucket because the average annual cost of this type of clinical research is $85,000 yearly for each of 3 years.

During fiscal year 1986, you appropriated $3 million for FDA's Orphan Product Grant Program. Over 100 inquiries from scientific investigators were submitted to FDA in competition for these limited funds, and only 21 grants were funded. Some of those not funded because of the shortage of funds were studies on treatments for diseases such amyotropic lateral sclerosis, which is the fatal muscle disease that killed Lou Gehrig and Senator Jacob Javits, and multiple sclerosis studies.

On the other hand, some of the grants that were funded included studies on hemophilia, diabetes, and perforation of the cornea, as well as drugs for the treatment or prevention of Wilson's disease, Iron Overload, urea cycle disorders, Huntington's disease, and many more life threatening orphan diseases, including porphyria.

I would like to speak extemporaneously now and say that I have porphyria, which is a rare blood disease, which causes indescribably painful attacks on the central nervous system leading to paralysis or death. I was a patient at NIH off and on for several years. I was in intensive care several times, and I wasn't expected to live. I was paralyzed twice.

The reason that I am here today is because of the moneys that you appropriated. I am taking at this moment a medicine called LHRH, and that medicine has saved my life, incidentally. I am personally grateful, and I am also grateful for all of the patients who have rare diseases. I thank you for those appropriations.

It is also interesting to note that during November 1987, an orphan drug conference will convene in Brussels because word about the success of America's orphan drug program has spread throughout the world. Common Market nations are now looking toward America for answers to their orphan drug dilemma.

There is no economic incentive to develop unprofitable drugs outside of the United States, so we in America have the only successful program in the world which other nations would like to replicate.

Our country's Orphan Drug Act creates a unique partnership between the government and the private sector to meet the needs of a neglected segment of society composed of 20 million Americans suffering from orphan diseases. That partnership has worked well.

Industry is doing its share by adopting promising new drugs and pursuing the FDA approval process. The government is doing part by providing tax incentives, exclusive marketing rights, and a speedier FDA approval process. These privileges are economic incentives to pharmaceutical corporations.

When the Orphan Drug Act was passed into law during January 1983, no one expected more than a handful of orphan drugs to be identified. But today more than 120 orphan products have been designated by the FDA, and therapies of limited commercial value that would never have been developed in the absence of the Orphan Drug Act.

We are grateful that you appropriated $3.5 million for the FDA's orphan drug grant program during fiscal year 1987, but that sum was reduced to $3.4 million by Gramm-Rudman-Hollings. We ask you to take just one last giant step by appropriating the full $4 million for this vital life saving program during fiscal year 1988. Congress, especially this subcommittee, can be very proud of its work on behalf of people with orphan diseases, but we still need your help to save lives and reduce unnecessary pain.

In essence, our lives are in your hands. Your compassion has given us hope, and with hope we gain strength. An old Chinese proverb teaches us that hope is like a road in the country. There never was a road, but when many people walk on it, the road comes into existence.

We are asking you to give us the tools we need to continue paving our highway to hope.

Thank you.

Senator BURDICK. Thank you very much.

[The statement follows:]

STATEMENT OF DESIREE DODSON

Mr. Chairman, members of the Committee, we are grateful for the opportunity to talk to you today about the needs of 20 million Americans with Orphan Diseases whose lives are touched by the Food and Drug Administrations (FDA) Orphan Products Development program, and in particular Orphan Drug research grants. I am Desiree Dodson, the Executive Director of the American Prophyria Foundation and a member of the Board of Directors of the National Organization for Rare Disorders (NORD). I am here today to speak on behalf of NORD, which is an umbrella group of approximately 70 national voluntary health agencies who are concerned about more than 5,000 Orphan Diseases.

As you know, the Orphan Drug Act of 1983 authorized $4 million annually to fund extramural research grants on new therapies for rare diseases. This appropriation is needed to underwrite the expenses of clinical trials conducted by academic scientists who are developing new orphan therapies. The products studied by these researchers usually do not have an industry sponsor. The government's support of small clinical research projects is absolutely essential because these initial tests are supposed to develop the data which is needed to attract a commercial sponsor. Without this "seed money" many life saving therapies may never get to market.

This Agriculture Subcommittee has appropriated funds for this vital FDA research program since 1982, raising it by small increments annually. We are asking now that you appropriate the full $4 million for fiscal year 1988 which was authorized by the original Orphan Drug Act. We want you to know that we understand the governments limitations, so we are trying to raise research donations from the public to supplement your appropriation, but this is a very difficult task. The $40,000 we've raised to date is a drop in the proverbial bucket because the average annual cost of this type of clinical research is $85,000 yearly for each of three years.

During FY86 you appropriated $3 million for FDA's Orphan Product grant program. Over 100 inquiries from scientific investigators were submitted to FDA in competition for these limited funds, only 21 grants were funded. Among the research projects that were approved but NOT funded (because of insufficient funding) were studies on treatments for diseases such as Amyotrophic Lateral Sclerosis (ALS) which is the fatal muscle wasting disease that killed baseball player Lou Gehrig and Senator Jacob Javits; Congenital Toxoplasmosis which is a life threatening infection passed by a mother to her newborn infant; Apnea of Prematurity which is a sleep disorder that causes newborn premature infants to stop breathing; Multiple Sclerosis which is a life threatening neurological disorder that strikes adults in the prime of their lives; and Cytomegalovirus infections which tend to affect vulnerable children undergoing organ transplants.

As you can see, these conditions are either untreatable or presently available therapies are considered to be grossly inadequate. On the other hand, you can be very proud that the money you did appropriate for FY86 is supporting research to develop medical devices for hemophilia, diabetes and perforation of the cornea, as well as drugs for treatment or prevention of Wilson's disease, Iron Overload (hemochromatosis), urea cycle disorders, Huntington's disease (popularly known as Woodie Guthrie's disease), childhood colitis, cyanide poisoning and many more serious life threatening orphan diseases including porphyria. In fact, I have porphyria and was the first patient to take the orphan drug called LHRH Analogue. Indeed, the reason I am well enough to be here today is because development of this drug as a treatment for porphyria is being supported through funding you appropriated for 1986 orphan drug grants.

Porphyria is a rare inherited blood disease which causes indescribably painful attacks on the central nervous system leading to paralysis or death. Before the Orphan Drug Act was enacted there was no adequate treatment for porphyria. Today, the orphan drug Hematin has been approved for marketing by the FDA and the orphan drug "LHRH Analogue" is in the midst of clinical trails supported by the funding that you appropriated last year. On behalf of 100,000 Americans who have porphyria I want to thank you for your compassion and foresight.

It is interesting to note that during November 1987 an Orphan Drug conference will convene in Brussels because word about the success of America's orphan drug program has spread throughout the world. Common Market nations are now looking toward America for answers to their orphan drug dilemma. There are no economic incentives to develop unprofitable drugs outside of the United States, so we in America have the only successful program in the world which other nations would like to replicate. Our country's Orphan Drug Act creates a unique partnership between the government and private sector to meet the needs of a neglected segment of society composed of 20 million Americans suffering from Orphan Diseases. That partnership has worked well; industry is doing its share by adopting promising new drugs and pursuing FDA approval. The government is doing its part by providing tax incentives, exclusive marketing rights and a speedier (thus less expensive) FDA approval process. These privileges are economic incentives to pharmaceutical corporations. When the Orphan Drug Act was passed into law during January 1983, no one expected more than handful of Orphan Drugs to be identified. But today more than 120 orphan products have been designated by the FDA........ Therapies of limited commercial value that would never have been developed in the absence of the Orphan Drug Act.

Conversely, while the industry and government are working in concert for the prevention of pain and reaffirmation of life, academic investigators have no incentive to carry on their lonely work at University laboratories unless they stand a reasonable chance of competing for funds from FDA's Orphan Drug grant program. It is YOUR appropriation which the scientist must apply for when the kernel of an idea for a new therapy is ready to be tested in a small clinical trial. Usually, pharmaceutical companies are not interested in these drugs during the initial stages of development. However, if a clinician can test the drug in perhaps 20 or 30 patients, the resulting data can then be used to prove that the drug is indeed promising. A potential commercial sponsor can be enticed into adopting an orphan drug when he has reason to believe that the drug will eventually be marketable. That commercial sponsor can then pursue larger clinical trials, toxicology and other FDA required tests in pursuit of FDA approval.

We are grateful that you appropriated $3.5 million for the FDA's Orphan Drug grant program during FY87, but that sum was reduced to $3.4 million by Gramm-Rudman-Hollings. We ask you to take just one last giant step by appropriating the full $4 million for this vital life saving program during FY88. Congress, and especially this Subcommittee, can be very proud of its work on behalf of people with orphan diseases, but we still need your help to save lives and reduce unneccessary pain.

In essence, our lives are in your hands. Your compassion has given us hope, and with hope we gain strength. An old Chinese proverb teaches us that "Hope is like a road in the country; there never was a road, but when many people walk on it, the road comes into existence".

We are asking you to give us the tools we need to continue paving our highway to hope.

Thank you.

NATIONAL MILK PRODUCERS FEDERATION

STATEMENT OF JAMES C. BARR, CHIEF EXECUTIVE OFFICER

Senator BURDICK. Next we will hear from Mr. James C. Barr, chief executive officer of the National Milk Producers Federation.

Mr. BARR. I have a prepared statement that I would like to submit for the record, and I have a very abbreviated portion of that statement that I would like to read, if I may.

Senator BURDICK. Please proceed.

Mr. BARR. We are pleased to have this opportunity to comment on the budget requests for the agencies of the U.S. Department of Agriculture as well as activities of the Food and Drug Administration. I will submit my testimony for the record, and highlight the specific recommendations contained in the statement. Those are basically six points, Mr. Chairman:

One: That the administration's proposal to fund the Agricultural Cooperative Service through fees be rejected.

Two: That the Agricultural Research Service truly be made the lead federal agency for human nutrition research in reality rather than in theory.

Three: That the report language, and necessary, increased funding for the Food and Drug Administration to provide advanced, technical training for federal, state, and industry personnel to implement new milk safety prevention practices in highly automated, computer-controlled processing operations.

Four: That funding of child nutrition programs at levels which reflect program increases authorized by Public Laws 99–500 and 99–592, especially for restoration of the special milk program to half-day kindergartens.

Five: The $66.7 million for the Brucellosis Eradication Program.

Six: Increase in funding for the Dairy Indemnity Program or provision made to borrow from the CCC for immediate response to contamination incidents; further, we recommend that USDA purchase contaminated animals when it would be more cost-effective than feeding out.

If I might elaborate briefly on points three and six, Mr. Chairman.

It is critical that the Food and Drug Administration devote at least $300,000 for milk safety training of regional and state milk regulatory officials to improve knowledge levels of microbiological contamination potentials and implement uniform practical onsite demonstration and training exercises which will benefit those responsible for assuring milk safety and protecting the public health under the Cooperative Federal-State Interstate Milk Shippers Program. This funding should be earmarked for technical training development through the Milk Safety Branch of the FDA.

Finally, the recent heptachlor contamination incident in Arkansas calls attention for the need for quick response to provide immediate emergency funding under the Dairy Indemnity Program. Perhaps authority can be provided to USDA to borrow funds for emergency contamination incidents from the Commodity Credit Corporation, which would be reimbursed through a supplemental appropriation. Or, Mr. Chairman, perhaps, the committee would prefer to appropriate $10 million, but make expenditures subject to the request of the Secretary.

This completes my oral statement. I would be happy to respond to your questions.

Senator BURDICK. Thank you very much for your statement.

Mr. Barr, you mentioned that the National Milk Producers Federation would like to see Agricultural Research Service take the lead in human nutrition research at the USDA. Currently, the Food and Nutrition Service, the Human Nutrition Information Service, the Extension Service, and the Food and Drug Administration all, to some extent, share in developing a national food and nutrition policy.

If the Agricultural Research Service were given the responsibility as the lead agency for human nutrition research, how do you think the nutritional status of our general population would be resolved with legislation?

Mr. BARR. I will answer your question as best I can, Mr. Chairman. At the present time, it is our contention that the consumer is getting mixed signals because of the dual responsibility between the Food and Drug Administration and the Department of Agriculture. If the Department of Agriculture were to have this authority solely, then we believe that those mixed signals would stop.

Second, on nutrition monitoring legislation, we do endorse nutrition monitoring legislation, but once again we would like to see the Secretary of the Department of Agriculture have veto authority over dietary guidelines coming out either from the Food and Drug Administration or the Department itself.

Senator BURDICK. You are suggesting, for the Dairy Indemnity Program, that it would be more cost effective for USDA to purchase contaminated animals, rather than paying farmers to feed them.

Mr. BARR. It depends on the level of contamination. The recent heptachlor incident in Arkansas, it would have been far cheaper for the Department to buy those animals rather than buy the milk, because the level of contamination was so high and, for some of those animals, they will be required to buy that milk for several years at a cost to the government far greater than the cost would have been, had they been permitted to buy the animals.

Senator BURDICK. Senator Grassley.

Senator GRASSLEY. I have no questions for this witness.

Senator BURDICK. Thank you very much.

Mr. BARR. Thank you, Mr. Chairman.

[The statement follows:]

STATEMENT OF JAMES C. BARR

We are pleased to have this opportunity to comment on the budget requests for the agencies of the U.S. Department of Agriculture as well as activities of the Food and Drug Administration. Specific recommendations contained in our statement include:

(1) That the Administration's proposal to fund the Agricultural Cooperative Service through user fees be rejected.
(2) That the Agricultural Research Service truly be made the lead federal agency for human nutrition research in reality rather that in rhetoric.
(3) Report language, and if necessary, increased funding for the Food and Drug Administration to provide advanced, technical training for Federal, state, and industry personnel to implement new milk safety prevention practices in highly automated, computer-controlled processing operations.
(4) Funding of child nutrition programs at levels which reflect program increases authorized by P.L. 99-500 and 591, especially for restoration of the Special Milk Program to half-day kindergartens.
(5) $66.7 million for the Brucellosis Eradication Program
(6) Increase in funding for the Dairy Indemnity Program or provision made to borrow from the CCC for immediate response to contamination incidents; further, recommend that USDA purchase contaminated animals when it would be more cost-effective than feeding out.

AGRICULTURAL COOPERATIVE SERVICE

The Agricultural Cooperative Service of USDA is the only Federal agency charged with the responsibility to assist agricultural cooperatives and their farmer-owners in dealing with organizational, operating and management problems.

At a time when the income situation faced by American farmers has deteriorated, there is greater need than ever for strong, effective cooperatives to assist farmers in holding the line on production costs and in obtaining the best return available in the market. Unfortunately, like their farmer members, many cooperatives today find themselves under increasing pressure to provide efficient services to a shrinking agriculture sector as a result of the chaotic state of the farm economy.

The demands placed on the agency have increased over the past few years. The changing conditions under which cooperatives operate, the increasingly critical state of the farm economy and the desire of new groups within agriculture to avail themselves of cooperative marketing and supply arrangements have all contributed to this increased demand.

As existing cooperatives face streamlining of operations and the need for technical assistance from ACS, other types of cooperatives look to the same agency for assistance in developing new cooperatives as a way to strengthen their marketing ability and their income. During the past year, ACS provided technical assistance to 95 cooperatives and producer groups and forty-three of these involved emerging or developing cooperatives serving a total membership of more than 5,900.

In conclusion, now is not the time to fund the Agricultural Cooperative Service through user fees. Already distressed or emerging cooperatives with little available capital are not in a position to pay for the services they need at a critical development or restructuring juncture. We commend the Subcommittee for rejecting the use of user fees in the past and hope that your strong support for the Agricultural Cooperative Service continues.

AGRICULTURAL RESEARCH SERVICE

In the budget submitted to this committee, it is interesting to note that USDA refers to the Agricultural Research Service as the lead Federal agency for human nutrition research.

The National Milk Producers Federation would dispute that claim. A quick look at the number of human nutrition research projects underway in USDA as compared to the Department of Health and Human Services would seem to contradict that claim.

According to the "Human Nutrition Research: The Federal Five Year Plan", published March of 1986 by the Interagency Committee on Human Nutrition Research, within DHHS a total of 2,475 projects are underway, with the National Institute for Health devoting 73 percent of their budget to human nutrition research while in USDA a total of 21 percent spending in FY 1984 was devoted to 1, 043 human nutrition research projects.

The National Milk Producers Federation wishes that USDA's claim were true. Both the consumers and the agriculture community have been buffeted by numerous, often conflicting and rarely coordinated warnings about what should be eaten for what health or nutrient deficiency and potential disease-resulting consequences.

In addition to reasserting the lead in human nutrition research, we believe it is time for USDA to reassert control over the dietary guidelines issued to the general population. It serves no purpose other than creating panic and confusion to have one report after another issued by various government agencies and singling out certain foods only to be contradicted by another agencies' finding with completely opposite recommendations for different purposes.

Therefore, we would urge this Subcommittee to carefully examine the funding levels in USDA compared to those at DHHS devoted to human nutrition research. While there is no question that DHHS and its various agencies need to carry out specialized research and have made tremendous gains for detection, prevention, and treatment of many diseases from a nutritional perspective, that role needs to be recognized as specialized compared to the general need for guidance for the general population.

FOOD AND DRUG ADMINISTRATION

The Federation supports all efforts to reassure the American public of the safety of the pasteurized milk and milk products supply including seeking earmarked or increased funding for the Food and Drug Administration to provide advanced, technical training for federal, state, and industry personnel to implement new milk safety prevention practices in highly automated, computer-controlled processing operations.

FDA recently completed an in-depth evaluation of new milk safety procedures and practices which must be implemented to prevent microbiological contamination of dairy products and re-occurrence of the recent milk-borne related disease outbreaks.

It is critical that FDA devote at least $300,000 for milk safety training of regional and state milk regulatory officials to improve knowledge levels of microbiological contamination potentials and implement uniform practical onsite demonstration and training exercises which will benefit those responsible for assuring milk safety and protecting the public health under the Cooperative Federal-State Interstate Milk Shippers Program. This funding should be earmarked for technical training development through the Milk Safety Branch of FDA.

We would urge the committee to provide report language so that FDA clearly understands the need and priority that must be directed to the training at the regional and industry levels.

FOOD AND NUTRITION SERVICE

The dairy industry has long supported the child nutrition programs and have gone on record repeated to urge adequate funding. We view the National School Lunch Program as the cornerstone of our child nutrition efforts and believe it is critical that all children in the United States have access to it regardless of family income levels. Therefore, we once again go on record in opposition to the Administration's proposal to eliminate the 25 cent subsidy which insures that schools are able to provide meals to all children.

We urge this Subcommittee to provide the $33 million needed to fund the Special Milk Program at the level authorized by P.L. 99-500 and 591 which restored the program to the half-day kindergartens if the schools do not offer the other feeding programs. As you know, milk is an essential nutrient source for children especially essential as a supplier of calcium, phosphorus, riboflavin, and protein so important to healthful development during a child's growing years.

The Child Care Feeding Program, the Summer Feeding Program, and the School Breakfast program meet important needs in the overall child nutrition plan. Sufficient funding for the Child Care Feeding Program is necessary to assure availability to the children of the working poor who are forced to leave their children in day care centers for extensive periods of time from breakfast through dinner.

The WIC program is an example of a highly effective program dealing with one of the most critical nutritional needs of the nation. Full funding for this program providing supplemental food service to all eligible pregnant and lactating women and their children and infants is wholely supported by the dairy industry.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

The Federation requests continued strong support of appropriations for a program of animal disease protection administered by the Animal and Plant Health Inspection Service (APHIS). In particular, we recommend continued support for the Brucellosis Eradication Program at $66,733,000 for FY 1988. This recommendation is consistent with the need to provide steady, strong support for the eradication effort to enable the U.S. to achieve a Class A rating for all states by 1991.

In 1991, USDA wants to be able to reduce Federal involvement and limit activities to include surveillance, recordkeeping, information, and compliance. Unless strong funding is maintained over the requested $63 million level, adequate resources will not be available in the high incidence states of Oklahoma, Texas, Arkansas, Mississippi, Louisiana, and Florida where 87 percent of the nation's infected herds were located as of March 1986.

Beginning October 1, 1987, USDA will provide funds for vaccination only if an accredited veterinarian is on a premises performing fee-basis testing or if a full-time federal or state employee is on a premises performing brucellosis herd testing. While USDA continues to recommend calfhood vaccination, especially in the high incidence states, the administrators budget request for Brucellosis will not provide necessary funds for vaccination to encourage herd owners to fully implement herd plans and agreements to test for brucellosis. Difficulties with adequate testing in the highly infected states require a continued major federal emphasis on vaccination if USDA hopes to achieve the goal of eradication by 1991.

We respectfully request this committee to carefully question the logic and plans USDA intends to follow to reduce resources for vaccination where needed in the highly infected states. We question the logic of reducing funding or vaccination in the highly infected states until such time as the infection rate is reduced to less than 0.25 percent for 12 months in these areas.

DAIRY INDEMNITY FUNDING

The recent heptachlor contamination incident in Arkansas calls attention for the need for quick response to provide immediate emergency funding under the Dairy Indemnity Program. We recommend that USDA give a much higher priority to how funding can be made available on an emergency basis. It is incomprehensible for farmers and their families to be subjected to such devastating losses for so long without relief while USDA investigates and tries to determine what to do. Perhaps authority can be provided for USDA to borrow funds for emergency contamination incidents from CCC which would be reimbursed through a supplemental appropriations. Another missing USDA action is the lack of consideration which has been given to the purchase of contaminated animals rather than paying farmers to milk-out the animal. Recent evidence from the Arkansas incident clearly indicates that USDA has not purchased any highly contaminated cows in the most severely contaminated herds. Recent findings would further support the need to purchase the cow rather than pay for the milk-out because during the fall and winter months, a longer half-life to reduce the level of contamination has occurred. At the end of January, the half-life was up to 82 days from 51 days back in August 1986 on the more highly contaminated animals above .3 ppm.

The Federation urges this committee to request USDA to give a higher priority to quick response emergency funding and the purchase of highly contaminated animals when it is clear a cost savings would result from such action.

I thank the Subcommittee for this opportunity to testify and would be happy to respond to questions.

CONSORTIUM OF SOCIAL SCIENCE ASSOCIATIONS

STATEMENT OF DR. GERALD KLONGLAN, PROFESSOR, IOWA STATE UNIVERSITY

Senator BURDICK. Professor Klonglan of Iowa State University representing the Consortium of Social Science Associations.

Dr. KLONGLAN. Thank you, Mr. Chairman, and members of the subcommittee. My name is Gerald Klonglan. I am the chair of the Department of Sociology and Anthropology at Iowa State University, and immediate past president of the Rural Sociological Society.

I am here today on behalf of the Consortium of Social Science Associations, known as COSSA, which represents over 145,000 American scientists across the broad range of social and behavioral science disciplines. A list of COSSA members, affiliates and contributors is attached to my statement.

I appreciate the opportunity to discuss with you the need to fund priority rural social science research that will be used to help solve the serious problems of contemporary rural America.

My specific request is for your committee to consider restoring the $2 million for rural development research that the State Agriculture Experiment Station directors had included in their fiscal year 1988 budget request to the Cooperative State Research Service of the Department of Agriculture.

The $2 million was to begin to expand our social science research capacity to provide better information to public and private decisionmakers at local, state and national levels who are struggling to develop viable rural development policies to aid rural families, businesses, and communities.

Today, the primary problems of rural America are economic, social, and political. The solution to these problems rests in part on the scientific concepts, methods and data of social scientists.

In the early 1980's, the deans and directors of our State Agriculture Experiment Station system began to see that the emerging socioeconomic problems in the countryside needed an expanded research effort. In 1986, the State Agriculture Experiment Station system identified the study of rural families and communities as one of their top priority research initiatives.

During the past 2 years, many important national groups have expressed a renewed interest in rural development research that could generate knowledge for a new world development policy.

Some recent social science research has already been very useful in developing and implementing policies for rural America. For example, the Heffernan 1985 study of the impact of the farm crisis on rural families and communities has resulted in many concrete strategies for helping people make adjustments to rapid social and economic change.

Those of us who believe that there should be an increased rural development research effort in fiscal year 1988, fully recognize the severe budget constraints under which the 1988 federal budget is being prepared. We, however, are sincere in our belief in the urgency of increasing our attack on these serious rural development problems.

Because of several years of level or reduced funding from federal and state sources, rural social science researchers do not have the financial resources to implement some priority rural development studies. There are many competent social scientists across the United States who are ready to initiate and expand their rural development research work.

There are some rural research studies that need to be done. One of the top-priority needs in rural America is jobs. We must get rural America geared up to survive in the post-industrial society. We need to create a new occupational structure in rural America. One aspect of this new occupational structure will be the opportunities associated with the emerging information age.

Research studies are needed to determine the resources necessary to create a viable information age infrastructure that will allow new jobs and businesses to develop in rural America. Just as the United States decided it needed a rural road transportation infrastructure 70 years ago, and a rural electricity infrastructure 50 years ago, perhaps today we need a telecommunication infrastructure.

Attachment A presents a brief summary of the justification, needed research, and potential payoff of a research initiative on telecommunication and rural development.

There are three other rural development topics related to creating jobs, and they include, first, research to strengthen the international competitiveness of rural industries; second, research to understand sources of employment change in rural areas; and, third, research to understand rural capital markets.

Research is also needed on the noneconomic institutional sectors of rural areas. One of the major challenges is the organizing and financing of its public services. Here we need research to evaluate alternative rural government, organizational and financial arrangements.

Another problem in many rural areas is really the lack of leadership. Research is needed to identify strategies and skills to enable the residents of rural America to deal effectively with problems and opportunities that affect their lives and well-being.

In closing, I think it fitting in this centennial of the Hatch Act, which created the Agriculture and Home Economics Experiment Station as the research component of the Land-Grant University System, to renew our commitment to fulfilling the goals of the Hatch Act in its full dimension—to improve the total quality of life for rural people. To do this, means a viable research program for rural development. The restoration of the $2 million originally proposed by the State Agriculture Experiment Stations will be a major step in that direction.

Thank you for allowing me to appear before you today.

Senator BURDICK. Dr. Klonglan, in your statement, you ask the committee to restore $2 million for rural development research. You mention that these funds will be used to expand social science research so that policymakers and businesses can become more informed on rural development. If this money is restored, How do you envision the rural scientists dealing with rural development issues?

Dr. KLONGLAN. We assumed that the initial request was to be in the special grant categories, and if the funds were made available there would be a general request sent out to the land-grant universities so that the rural sociologists and rural social scientists would respond with priority research projects, and then on a competitive basis would be bid through CSRS, but to be awarded to priority projects. This research would be done on the state, regional, or national level, and the moneys would be allocated from these funds.

Senator BURDICK. Senator Grassley.

Senator GRASSLEY. Thank you, Mr. Chairman.

As the Senator from the state of Iowa, I am proud to have you here. We are going to have some Iowans tomorrow who will be testifying, even some from your university.

I have some friendly questions, and they would be in the way of an expansion of how you see the $2 million, if you were to have it restored, being spent.

First, in regard to your statement of how serious things are in rural America, I agree, and I think that you have done a good job in pointing out the things that research could do to help us out of the situation. Did the Department of Agriculture tell you why they decided to not include these funds in their request?

Dr. KLONGLAN. I do not have specific details. This was going to be new, additional funding. There were problems with the overall budget, the feeling was that any new or additional funds for activities, we would be very fortunate retaining some of the existing funds that were in the 1987 budget.

Senator GRASSLEY. Even if the $2 million were appropriated, it wouldn't be enough to cover as much as you would like. Do you believe that certain kinds of research should be given priority to begin to cure the immediate severe problems facing rural America within that $2 million?

Dr. KLONGLAN. We argue that jobs are critical in terms of the adjustment, the businesses that are going out and so on. Restructuring would be a very top priority. The second would be community leadership. Many communities say that they need leaders in order to reorganize themselves, to really compete as they look ahead.

In terms of the $2 million, we agree that this is not enough. We established another task force on the national level, and we are working very hard on our fiscal year 1989 budget to come in with a much more rigorous file and a larger scope that we think is really essential at this point.

Senator GRASSLEY. My next question would be more general. From the perspective of the social science researcher, I would like to have your assessment.

I guess I should ask the question this way: You are aware of the results of a lot of research going on around the country where those researchers have noticed what they refer to as a bottoming out, or a reaching the bottom of the recession or depression we are in, and particularly the problems associated with that.

Do you see that, from your research, as having happened?

Dr. KLONGLAN. There are some indicators, prices are dropping, the line is moving some places in the state. However, it varies from community to community. There are communities that are really stressed. There are some communities where unemployment is 20 to 25 percent, even though official statistics may only show 6 or 7 percent, but that is because people have stopped looking for jobs.

There are some very serious problems out there that are going to be there for the next 5 or 10 years as this restructuring takes place.

Senator GRASSLEY. Thank you very much.

Thank you, Mr. Chairman.

Senator Sasser, meet Dr. Klonglan from Iowa State University.

Senator SASSER. I thought that you were taking over for the chairman.

Senator GRASSLEY. I am done.

Senator SASSER. Thank you very much, Doctor. We appreciate your appearing here today and hearing your testimony.

[The statement follows:]

STATEMENT OF GERALD E. KLONGLAN, PH.D.

My name is Gerald Klonglan and I am Chair of the Department of Sociology and Anthropology at Iowa State University and the Immediate Past President of the Rural Sociological Society. I am here today on behalf of the Consortium of Social Science Associations (COSSA). COSSA represents over 185,000 American scientists across the broad range of social and behavioral science disciplines. A list of COSSA Members, Affiliates and Contributors is attached. I appreciate the opportunity to discuss with you the need to fund priority rural social science research that will be used to help solve the serious problems of contemporary rural America.

My specific request is for your committee to restore $2 million dollars for rural development research that the State Agriculture Experiment Station Directors had included in their FY 1988 budget request to Cooperative State Research Service of the Department of Agriculture. The $2 million was to begin to expand our social science research capacity to provide better information to public and private decision makers at local, state and national levels who are struggling to develop viable rural development policies to aid rural families, businesses and communities.

Today the primary problems in rural America are economic, social and political. The solution to these problems rests in part on the scientific concepts, methods and data of social scientists. In the early 1980's the Deans and Directors of our State Agriculture Experiment Station (SAES) system began to see that the emerging socio-economic problems in the countryside needed an expanded research effort. In 1983, the SAES system embarked on a very elaborate procedure that would identify emerging rural and agriculture research priorities for the remainder of the twentieth century. National conferences (ESCOP, 1985) and workshops (ESCOP, 1986) were held. Over 400 research problems suggested by dozens of organizations were eventually boiled down to 80 new research initiatives. Of these 80, 21 were finally identified as having top priority (ESCOP, 1986). One of these 21 initiatives was titled, "Family and Community Well-Being." This initiative recognized the need to allocate more resources to rural social science research to help deal with the increasing number of rural families and communities facing economic and social crises. When the SAES prepared its national budget request for Fiscal Year 1988, $2 million in special research grant funds were requested for this research initiative. It is not included in the proposed USDA FY 1988 budget. Many people believe priority should be given to this rural development thrust given the severity of the socio-economic problems in rural America.

Indeed, the problems have even intensified during the past year. Because of the continued disintegration of many families, businesses, and communities, the SAES system established a national task force on "Agriculture and Community Viability," in November 1986 to develop a more detailed research agenda for rural development (Zuiches, 1986). This task force report will provide the basis for an expanded budget request for rural development research in the Fiscal Year 1989 budget. Other key actors in the USDA research priority setting process are also giving increased attention to the need for rural social science research. During the past year, both the Joint Council on Food and Agricultural Sciences and the USDA's Users' Advisory Board have requested major rural social science presentations at their regular meetings. And during the past year many other important national groups have expressed a renewed interest in rural development research to generate knowledge for new rural development policy. These include the National Governors Association, Council on State Governments, National Conference of State Legislatures, Council of State Policy and

Planning Agencies, National Association of State Development Agencies, National Association of Countries, and the National Association of Towns and Townships.

Both the U.S. House of Representatives (Whitten, 1987) and the U.S. Senate (ERS, USDA, 1987) have expressed concern about the problems of rural America and the need to develop new, viable rural development policy. Also the Federal Reserve Banks are interested in developing rural economic policy choices (Drabenstott, et. al, 1987). The emerging problems of rural development in the southern part of the U.S. are the focus of a recent book, Agricultural Change: Consequences for the Southern Farms and Rural Communities, (Molnar, 1986). Many people believe that rural development will be one of the most important issues in the U.S. Presidential Campaign. The preliminary activities of candidates in Iowa the past three months certainly support that view.

Some recent social science research has already been useful in developing and implementing policies for rural America. Heffernan and Heffernan's (1986) study of the impact of the farm crisis on rural families and communities has resulted in many concrete suggestions for helping rural people make adjustments to rapid social and economic change. Anther study by rural sociologists found that while standard procedures used to identify unemployment in rural areas suggested a 6.5% unemployment rate, the actual unemployment rate was 17.3% or three times as high (Korsching and Lasley, 1986). Since this study, the standard procedures used to identify unemployment rates in rural areas are being reviewed and modified to more correctly reflect the real employment conditions in rural America. And local rural areas have been able to use the "true" unemployment rates to qualify for special retraining and other development programs.

Agriculture economists, rural sociologists and home economists are also studying the future human capital needs for rural America (Deacon and Huffman, 1986; Jennings, et al., 1987). These studies are focusing on the changing occupational structure and the need to adapt our educational and training systems to prepare our youth and adults for the 21st Century. Other studies are focusing on future health care systems for rural America (Sargent, 1987).

Those of us who believe there should be an increased rural development research effort in FY 1988 (and FY 1989) fully recognize the severe budget constraints under which the 1988 federal budget is being prepared. We, however, are sincere in our belief in the urgency of increasing our attack on these serious rural development problems.

Because of several years of level or reduced funding from federal and state sources, rural social science researchers do not have the financial resources to implement some priority rural development studies. There are many competent social scientists across the U.S. who are ready to initiate and expand their rural development research work.

What are some other rural development research studies that need to be done?

One of the top priority need in rural America is jobs. People need income producing work, whether as self-employed small business operators or working for a business or industry. The approaches used to create new job opportunities must be couched in the framework of the massive changes occurring in the occupational structure of America. We must get rural America geared up to survive in the post-industrial society. We need to create a new occupational structure in rural America. We need research to facilitate the transfer of rural people (farmers and their spouses, unemployed industrial workers laid off by farm implement companies, small business people of all types who no longer can survive in their local rural community, etc.) to the new occupational structure. One aspect of this new occupational structure will be the opportunities associated with the emerging "Information Age." Studies are needed to determine the types and kinds of "Information Society" jobs and businesses that can be done as profitably in rural areas as in urban areas. Most of us have heard about workers in Atlanta working via their home computer and telephone lines to their offices in Chicago. Many rural people (families, businesses and communities) cannot participate in such opportunities today because they do not have the appropriate "information age" infrastructure. They do not have adequate telephone systems or access to existing lines to be hooked into the national telecommunication system. Research studies are needed to determine the resources necessary to create a viable information age infrastructure that will allow new jobs and businesses to develop in rural America. Just as the U.S. decided it needed a rural road transportation infrastructure 70 years ago, and a rural electricity infrastructure 50 years ago, perhaps we need a telecommunication infrastructure today. Attachment A presents a brief summary of the justification, needed research, and potential payoff of a research initiative on Telecommunications and Rural Development. (The summary was prepared by Dr. Donald Dillman, Professor of Rural Sociology, Washington State University.) Some other rural development research topics that relate to economics and jobs include:

> STRENGTHENING INTERNATIONAL COMPETITIVENESS OF RURAL INDUSTRIES--identifying problems undermining the competitiveness of rural industries in world markets and developing effective solutions to these problems can be critical to the future vitality of rural areas. (A more detailed research statement on this topic has been prepared by Dr. William R. Gillis, Professor of Agriculture Economics at Pennsylvania State University.)
>
> SOURCES OF EMPLOYMENT CHANGE: To enhance rural economic development policy, it is crucial to know how changes in employment (e.g., births, deaths, expansions, contractions, migration) occur; which size and sector of firms are most dynamic; and whether differences in sources of change appear among areas. (A more detailed research statement on this topic has been prepared by Dr. Ron Shaffer, Professor of Agriculture Economics at the University of Wisconsin-Madison.)
>
> RURAL CAPITAL MARKETS: To enhance the flow of capital within rural areas to those activities offering the greatest potential for economic development, it is necessary to understand how rural nonfarm enterprises use capital; where they acquire their capital; and how rural capital markets are linked to nonrural capital markets. (Dr. Ron Shaffer has prepared a research statement on this topic too.)

Research is also need on other institutional sectors in rural America. One of the major challenges to rural America is the organizing and financing of its public services.

> RURAL GOVERNMENT ORGANIZATION AND FINANCE: Farm economic troubles are reducing the fiscal capability of rural governments to provide essential services including education and transportation. The structure of local governments in rural areas is becoming increasingly limiting. The loss of federal revenue sharing has compounded problems--rural counties in many farm states have or will be losing up to 50% of their farm property tax base: township roads in Illinois were financed up to

20% with revenue sharing funds. Alternative organizational and delivery arrangements and funding mechanisms need to be investigated and considered. (A more detailed research statement on this topic has been prepared by Dr. David L. Chicoine, Professor of Agriculture Economics at the University of Illinois--Champaign.)

COMMUNITY LEADERSHIP DEVELOPMENT: As one tries to assess why some rural communities are more vibrant and viable than other communities, the topic of community leadership often surfaces. Research is needed to identify community leadership skills and community leadership networks to enable the residents of rural America to deal effectively with problems and opportunities that affect their lives and well being. (A more detailed research statement on this topic has been prepared by Dr. Kenneth Wilkinson, Professor of Rural Sociology, Pennsylvania State University.)

In closing, I think it fitting in this centennial year of the Hatch Act, which created the Agriculture and Home Economics Experiment Station as the research component of the Land Grant University System, to renew our commitment to fulfilling the goals of the Hatch Act in its full dimension: to improve the total quality of life for rural people. To do this, means a viable research program for rural development. The restoration of the $2 million originally proposed by the State Agriculture Experiment Stations will be a major step in that direction.

REFERENCES

Deacon, Ruth E. and Wallace E. Huffman
1986 Human Resources Research. College of Home Economics, Iowa State University, Ames, Iowa.

Drabenstott, Mark, Mark Henry and Lynn Gibson
1987 The Rural Economic Policy Choice. Federal Reserve Bank of Kansas City, Economic Review. January, pp. 41-58.

Economic Research Service, USDA
1987 A Changing Rural America: Implications for Economic Development Policy. ERS, U.S. Department of Agriculture.

Experiment Station Committee on Organization and Policy (ESCOP)
1986 Research Initiatives: A Research Agenda for the State Agriculture Experiment Stations. Washington, D. C. The Cooperative State Research Service, U.S. Department of Agriculture.

1985 Research Perspectives: Proceedings of the Symposium on the Research Agenda for the State Agricultural Experiment Stations. Washington, D. C. The Cooperative State Research Service, U.S. Department of Agriculture.

Heffernan, William D. and Judith Bortner Heffernan
1986 Impact of the Farm Crisis on Rural Families and Communities. The Rural Sociologist, Vol. 6 (2): 160-170.

Jennings, Vivan, Paul Lasley and Wallace Huffman
1987 Future Human Capital Needs for Farming and Nonfarm Agricultural Careers. Iowa State University. Ames, Iowa.

Korsching, Peter F. and Paul Lasley
1986 Problems in Identifying Rural Unemployment. The Rural Sociologist. Vol. 6(3):171-180.

Molnar, Joseph J.
1986 Agricultural Change: Consequences for Southern Farms and Rural Communities. Westview Press. Boulder, Colorado.

Sargent, Charles A.
1987 Nurse Practitioners and Physician Assistants in the North Central Region. Department of Agricultural Economics, Purdue University. West Lafayette, Indiana.

Whitten, Jamie L.
1987 House of Representative Committee on Appropriations Views and Estimates on the Budget Proposed for Fiscal Year 1988. House of Representatives Committee on Appropriations, U.S. Government Printing Office, Washington, D. C.
Zuiches, James
1986 Request to ESCOP Subcommittee on Special Initiatives to Recommend the Formation of a Task Force on Agriculture and Community Viability. College of Agriculture, Washington State University, Pullman, Washington.

ATTACHMENT A

TELECOMMUNICATIONS AND RURAL DEVELOPMENT

RESEARCH OBJECTIVE

Determine Relationships Between the Quality of the Telecommunications Infrastructure of Rural Communities and the Potentials of These Communities for Economic Development.

JUSTIFICATION

By the end of this century more than two thirds of the U.S. labor force will be employed in information, knowledge, and education jobs, while less than 25% will be directly employed in manufacturing and agriculture. Successful performance of these jobs will require use of computers and advance telecommunication linkages with locations throughout the United States and the world. Because of the trend towards smaller work organizations and the independence of many of these jobs from a particular locale, it is possible for rural America to compete for them. However, this competition is possible only if advanced telephone and other telecommunications service are available in rural communities and rural Americans learn to use them. These information technologies are also of increasing importance for farms and all types of manufacturing. Unfortunately, rural America has a greater proportion of partylines, less digital switching, less trunkline capacity, poorer line quality, less optic fiber, fewer computers, and fewer of the other advanced information technologies. Overcoming these problems and finding ways to encourage the adoption of these technologies by rural households and businesses represents a possible means for revitalizing rural America.

NEEDED RESEARCH:

A multi-faceted research program should be undertaken to (1) inventory the telecommunications infrastructure that now exists in rural America and (2) identify deficiencies in that structure which inhibit agricultural and non-agricultural enterprise development. In addition, demonstration projects that test ways of utilizing advanced information technology to promote the development of non-agricultural employment alternatives need to be designed and evaluated. Further, research on people's residential preferences needs to be done in order to determine whether the existing preference structure of rural Americans favors rural development should the necessary information infrastructure be available in rural America.

POTENTIAL PAYOFF

If the proposed research shows that advanced telecommunication infrastructures can be used to create jobs in rural America, the payoff will be provided to people who wish to live and work in rural communities the possibility for that goal to be realized. In addition, the further concentration of our populations into relatively few metropolitan areas may be avoided.

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American Political Science Association
American Psychological Association
American Sociological Association
American Statistical Association
Association of American Geographers
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Association for Asian Studies
Association for the Social Sciences in Health
Eastern Sociological Society
Economic History Association
Gerontological Society of America
History of Science Society
International Studies Association
Law and Society Association
Midwest Sociological Society
National Council on Family Relations
National Council for the Social Studies
North Central Sociological Association
Northeastern Anthropological Association
Operations Research Society of America
Population Association of America
Regional Science Association
Rural Sociological Society
Social Science History Association
Society for the History of Technology
Society for Research on Adolesence
Society for Research in Child Development
Society for the Scientific Study of Religion
Southern Sociological Society
Southwestern Social Science Association
Speech Communication Association
The Institute of Management Sciences

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University of Nebraska
New York University
University of North Carolina, Chapel Hill
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University of Wisconsin, Milwaukee
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NATIONAL CENTER FOR APPROPRIATE TECHNOLOGY

STATEMENT OF PEGGY MILLER, VICE PRESIDENT, POLICY AND GOVERNMENT

ACCOMPANIED BY JOHN BARRINGER, PRESIDENT, AGRICENTER INTERNATIONAL, APPROPRIATE TECHNOLOGY TRANSFER FOR RURAL AREAS

Senator SASSER. Our next witness will be Ms. Peggy Miller, the vice president for policy and government at the National Center for Appropriate Technology, and she will be accompanied by Mr. John Barringer, the president of Agricenter International in Memphis, TN.

I want to welcome both of you before the subcommittee this afternoon. Let me just say that we will hear testimony from Ms. Miller who, as I indicated earlier, is the vice president for policy and government at the National Center for Appropriate Technology; and then from Mr. John Barringer, the president of the Agricenter International in Memphis, TN, where the Appropriate Technology Transfer for Rural Areas is based.

The acronym for this appropriate technology program is ATTRA. It is managed by the National Center for Appropriate Technology, and it is located at the Agricenter International in Memphis. Agricenter is a unique land development, which works to display a variety of agricultural advances and current technology. This vast display of agricultural technology provides access to the latest advancements and is taking agricultural science literally into the 21st century. The center has been well managed for the past several years by my good friend John Barringer, who is here before the committee today.

The ATTRA program seeks to provide information on low input farm technology and resource management. This is done, for those who may not know, through a data base established from technology gathered from across the country. This data base will be accessible by a toll free phone line. The information available will cover areas such as reducing the necessity of large quantities of fertilizer, reducing the quantities of pesticides necessary, and how to reduce the fuel and water usage. It will also provide information on improved cropping and conservation techniques, and rural infrastructure development plans.

The information which ATTRA seeks to provide is much needed by rural communities, which are still being squeezed by economic hardships. In 1986, the National Center for Appropriate Technology predicted that ATTRA could provide for potential savings of $10 billion per year, and this will be done in the following manner: $2.8 billion in retained soil nutrients; $2.0 billion in reduced fertilizer use; $2.0 billion in reduced pesticide use; $3.31 billion in energy savings; and a 36- to 56-percent savings in water usage.

In addition to cutting costs of farming, ATTRA will also lead to valuable conservation of natural resources and help to reduce ground water contamination.

ATTRA funding is provided through the Department of Agriculture's Extension Service. Last year, ATTRA received initial funding of $500,000 for fiscal year 1987, after requesting startup funds of $1.8 million. For fiscal year 1988, ATTRA is requesting $2.16 million to fully establish their data base and complete staff hirings so that they can get on with the very valuable work that this program has sought to do. Unfortunately, the administration has requested no funding for the program.

In these days of budget cutbacks, additional funding is a difficult thing to request, but the ATTRA program promises returns far greater than the input, and will provide an immediate source of information and technology to needy farmers and rural communities all across America.

We need programs like ATTRA to ensure that advancements in agricultural technology are put to good use. If farmers don't know about these advances, they really are not much good to us. Our farmers need ATTRA to help begin lowering their farm input costs. This is the type of program that can return profitability to all farmers, big and small alike.

It deserves our support. I am delighted to be supportive of it. I am happy to have Ms. Miller here and Mr. Barringer to give us their views on the programs.

We will start first with you, Mrs. Miller. I want to welcome you here.

Ms. MILLER. Thank you, Senator

My name is Peggy Miller. I am the counsel to the president of the National Center for Appropriate Technology. I am here today to talk a little bit more about the program that the Senator just mentioned. Basically, I wanted to just briefly bring you up to date in terms of where we are, and to ask the committee to consider our request of $2.16 million for the ATTRA, Appropriate Technology Transfer for Rural Areas. Beyond that, I would like my comments to be included in the record.

Senator SASSER. They will be included in the record in their totality.

Ms. MILLER. After the committee saw fit, which we very much appreciated, to start up ATTRA last year, with the Senator's support, the funds did move to begin the establishment of ATTRA. What is happening right now is that we are beginning to hire staff. They will be located at Agricenter International. This month, the first staff will go there and they will begin to gather the information so that they can be prepared by July 1 to open up the toll free lines.

Why we are requesting a substantial increase over the $500,000 that we did receive last year is primarily for the cost of the development of the complete data base that has already been referred to. Basically, the need for ATTRA, and an essential component of what ATTRA really is, is the data base.

In this beginning operating year, we will be able to down load from a number of data bases, and the Extension Service and the National Agricultural Library are being completely cooperative in this effort. In fact, they are working with us. They are encouraging us to base someone possibly up at the National Agricultural Library so that we could work at indexing their catalogues, data files.

A lot of this is happening, and we are very excited about it. Even though, what we were envisioning and what is much needed by technical specialists, by communities, was the data base that was built, that they could access possibly directly, that would be loaded by soil, climate conditions, et cetera.

The cost of doing something of that nature up front is why we have come in for this level. It is not an amount that will continue. The data base itself is $1.1 million. It is an amount for this next year. We feel that ATTRA is a very useful program for the farmers and the rural communities. We look forward to opening up the toll free lines.

We hope that you will support us again. Other than that, I will turn it over to John Barringer, who is here to support us, to make a few comments about the center itself.

Senator Sasser. Thank you, Ms. Miller.

I want to welcome you, John Barringer, before the subcommittee this afternoon, and we look forward to hearing from you about ATTRA.

Mr. Barringer. Thank you, Senator Sasser. I very much appreciate being here to talk to you and to the committee about this program.

The Agricenter is well known to you. It is a concept of a place where individuals can come from all over the United States to see new technology demonstrated, and research demonstrated, and where a person can come in and get the information. It is unique to this country. It is the only one of its kind.

The ATTRA program, which is the reason why we are here today is also one of a kind. There is no other program like this established in agriculture. It is needed very much as a program that can save time, that can make products and information accessible to people on a very timely basis, which will be very valuable to agriculture, not only farmers, but the actual Extension agents themselves, the whole area of agricultural production advantage of it, which is why it will be so successful.

Agricenter, as you know, is a place where things like this can take place. We do not at Agricenter actually put these on ourselves. We make it a place where we can stimulate the ideas and concepts of others who come in, and make things like the ATTRA data base have a place where they can be.

We are here to encourage you, to encourage the whole committee to support this concept. It is extremely valuable and it is extremely timely.

I appreciate very much your letting me come and express those thoughts to you.

Senator Sasser. Have you been able to get any mileage out of what you have in place now, have you been able to do what it was conceived to do when the whole system is completed; or do we have to complete the system before we can start putting in the data and the information?

Mr. BARRINGER. At this point, the program is just being put in place. The actual area in the Agricenter is being finished for the program staff to be located. The reason has been the slow process of working through the USDA, through the Extension Service to where all of these pieces are gathered. This has just happened in the last month.

At this point, we would see the program—there is a tremendous amount of interest. Everybody who comes through the center wants to know about the data. I cannot say that anything has happened because it is literally just beginning.

Senator SASSER. You are still in the process of putting it down, and this is an enormous undertaking. How do you go about collecting the various data?

Ms. MILLER. These are the systems that we are setting up right now. Basically, in this first year, we will be collecting data, working with the Extension Service, the staff they have here and others around the country. We will be working with the National Agricultural Library. We will be working with the Department of the Interior and EPA. They all have data bases, which we will be allowed to access for free, and that will be the information we need to answer the questions, which the toll free lines will start doing on July 1.

In the next 3 months, the staff coming in now will begin to access these data bases, and prepare to build the resource center, so that by the time the toll free lines open up, they will have perhaps 10 different data bases that they are connected to. In addition, there will be a number of resources, periodicals, literature, et cetera, that they will have on hand.

There are also located specialists in each state right now so that by the time the calls come in, they can also tell the persons, once we have assisted them, to locate someone within their area to help them.

Senator SASSER. Who will make full use of this information, other than the farmers?

Ms. MILLER. There are two areas that we see as the primary audiences. First, and the ones that we are aiming the most heavily at, and we would feel very successful if they would use ATTRA, are the Extension System itself, SCS, ASCS, the Wildlife Refuge operators, the other rural networks, and the community planners.

The people who can work with the farmers, if they will first access ATTRA so that they are acquiring the best technology information to solve all of the problems they can, that is step one. Otherwise, the farmers and the rural communities themselves, who are asking the kind of questions such as: How do I save money on inputs?

The rural communities, we feel, the calls are already beginning to come in from community planners, townships, mayors, who are very interested in looking at things like cutting energy and water costs, and waste management.

Senator SASSER. Will there be any educational followup service that ATTRA will provide?

Ms. MILLER. There is going to be a number of components. We have been looking for outside planning, and we have received funding for part of ATTRA from a foundation, which we will use to do workshops, training, and extension services of these technologies. This type of arrangement is something that we envision ATTRA is all about, to go out and work with specific rural communities. We will use pilot projects as a way of taking information, and having it transferred to others.

Senator SASSER. $500,000 was provided in fiscal year 1987 to get ATTRA underway. Tell the committee how ATTRA would expect to spend $2.1 million in 1988?

Ms. MILLER. We took the liberty, actually, with the funds that came in, the $500,000, and by the time we received it, the major expenditures had taken place. We will be operating for a 6-month period of time in 1987, so we are able to hire approximately 10 people who will be going in to operate that program, and that will be approximately $900,000 next year to maintain the toll free lines and the staff. The additional primary amount is $1.1 million, which has to do with the costly process of this data base development, which requires not only downloading.

It is a mechanism by which the different data bases, that are public and private, we would take off of those data bases anything having to do with low input agriculture, community resource management, and so on. We would then recode it because much of it is purely bibliographical information. The periodicals would have to be stamped, and they would have to be recoded, and put in with a stamp to catch all the special information, so that it is a useful data base that, in the future, users can access and make sense out of. That is the costly part.

I do want to stress that this is next year, and that amount cuts it in half the following year, and at that point the maintenance will only cost $250,000 versus $1.1 million in that first year. The costly part is the initial, where you have to go back into all of the data bases, the indices, and put such a system together.

Senator SASSER. Ms. Miller and Mr. Barringer, we thank you very much for appearing here this afternoon to give us this overview on your whole ATTRA program. I intend to continue supporting this program very vigorously. I think that it is important that our farmers have access to information which will allow them to cut their costs of production.

Clearly, I think that the information that they will be able to access through this ATTRA program will allow them to cut their costs. Against products from other countries, if we could reduce our costs, we might be able to compete more effectively, and at the same time allow our farmers to make a reasonable profit. This is one of the reasons that I am so enthusiastic about this program.

Thank you both very much for appearing here today to give the committee your views. I look forward to seeing the ATTRA program fully installed at the Agricenter, humming, and fully operational.

Ms. MILLER. Thank you, Senator.

Mr. BARRINGER. Thank you, Senator, we appreciate it very much.

[The statements follow:]

STATEMENT OF PEGGY MILLER

Mr. Chairman, Senators of the Committee, thank you for this opportunity to testify. My name is Peggy Miller. I am the Counsel to the President of the National Center for Appropriate Technology, NCAT. I am here today to ask that the Committee consider an FY 1988 funding level of $2.16 million for the ATTRA, Appropriate Technology Technology for Rural Areas, program which comes under USDA Extension's Federal Administration budget to continue the work initiated in FY 1987 and to make ATTRA fully operational by enabling us to implement the centralized data base and practitioner's advisory group components.

NCAT is a private non-profit corporation that offers technology transfer services in the agriculture, rural development, energy, building technology, health and international fields. Appropriate technologies are those best suited to the specific cultural, economic, social and ecological conditions at the site of their application so the community is assisted in achieving greater sustainability. NCAT manages federal, state and private sector contracts in this regard, one of which is ATTRA.

ATTRA is a new program which will centralize technical information on low input farming, agriculture diversification, and community resource management approaches and offer, through a national toll-free line system, technical and business management assistance to extension, farmers, wildlife refuge operators, rural communities and agriculturally-related businesses.

ATTRA is designed to provide information to help farmers lower their production costs by reducing inputs such as fertilizers, fuel and agricultural chemicals. At the same time, ATTRA will emphasize improved management practices such as crop rotation, crop diversification, alternative land uses, alternative marketing, and conservation tillage.

ATTRA will provide information and technical assistance to rural communities to help them reduce costs in such systems as water, energy, and sewage. ATTRA can help rural communities with a variety of techniques to achieve stability by stressing resource based economic diversification, business management related to other land uses, alternative marketing, and improved resource management.

Last year this Committee saw fit to start the ATTRA program at a level of $500,000 in FY 1987. I thank the Committee for this chance to begin ATTRA. With the full cooperation we are gratefully receiving from the Extension Service and the National Agricultural Library, we will use these funds to their maximum potential in this current fiscal year.

During this FY 1987 start-up year, ATTRA will establish a toll-free telephone line for farmers, extension agents, and rural communities to provide access to the latest information on low-input farming technologies, crop and market diversification,and community resource management techniques.

The initial ATTRA staff of ten is being assembled and will be located at Agricenter International, Memphis, Tennessee. The toll-free service and ATTRA assistance will begin July 1, 1987. In FY 1987, ATTRA will focus on gathering, analyzing and organizing information necessary to provide assistance to users who call during this start-up phase, as well as continue planning, particularly for the data base, for full operations in FY 1988.

Extension and NAL are being very helpful in this stage, as are many others including the University of Tennessee, Tennessee State, TVA, Dept. of Interior, DOE and EPA, and many from the private sector. The interest is keen in making this program work and offer sound information readily, so assistance is forthcoming from many areas.

In the last two years, NCAT had identified a critical economic need among farmers and rural communities for a central source of reliable information that they can use to cut operating costs through diversification, local resource management techniques and other methods to achieve optimum economic sustainability and maintain or improve the local resource base.

Furthermore, the natural resource base, a necessary and major component in any future rural economic development and stabilization program, as well as our source of drinking water and wildlife habitat maintenance, would be improved through the use of ATTRA technical systems on farms and in rural areas.

Let me clarify a bit. One simple way farmers can regain their economic health is to apply sound, low-input farming practices to cut costs up front. Potential savings of up to $10 billion per year are possible by using demonstrated, effective methods, particularly from reduced use of fertilizers, agriculture chemicals, water and energy.

In 1986, NCAT estimated that farmers could save $2.8 billion retaining nutrients currently lost, $2 billion in reduced fertilizer use, $2 billion in reduced pesticide use, 36-56 percent in water savings, and $3.31 billion in energy savings. These figures hold.

These savings are reflected in comparable savings for rural communities in water use, clean up costs for soil erosion, and reduced energy use. Diversified cropping, enhanced marketing and production systems, and the production of new technologies and resources to conserve water, energy, and chemicals will stimulate business growth in rural communities.

Low-input farming practices that yield economic returns also help preserve valuable natural resources. Currently, the value of these resources is too often ignored. Recent EPA studies show a marked increase in ground water contamination from farm sources including nitrates and toxic farm chemicals . Low-input farming can help reduce the use of these chemicals and reduce loss of expensive top soil. Soil erosion levels of 5 billion tons annually continue on major acreage. This wastes the soil resource, pollutes surface water, and imposes high clean up costs on local and state governments. Rotation management and other low-input approaches can do much to stabilize valuable soil.

The Conservation Reserve Program has brought 19.5 million acres into the reserve as of March 1987. This should significantly decrease soil erosion from this land, reduce surface water pollution and consequently reduce the costs of clean-up for rural roads, drainage ditches, and streams. ATTRA will assist Extension in relaying the best information on the uses of the Conservation Reserve Program and the means to achieve the best use of the retired lands from a cash perspective.

Finally, from the standpoint of need for ATTRA information on low input farming and community resource management, I want to stress the point that what State Extension Directors, rural community governments and planners, county agents and rural technical specialists are telling us daily is that they need help in figuring new ways to come up with cash, provide jobs, and stay in existence.

New products, new ways of using the land and water resources, new ways of marketing current products, new ways of processing and any means to cut operating expenses are being looked at seriously. Low input farming, crop diversification, other marketing approaches and community resource management is just what ATTRA is all about.

Still even ATTRA will need the centralized data base system we asked for last year but are unable to afford with the $500,000 budget level we received. Such a system would locate, analyse and categorize information from all agencies and the private sector, not just the USDA system. The attempts to find information and learn about new approaches are still being carried out through a hit or miss process. Different agencies are funding research and development of products and model systems with no systematic communication existing between them.

For example, DOE is funding the research and development of a machine which would be able to test the soil every few feet for its nitrate levels and apply only necessary fertilizer amounts. No systematic way exists to ensure such information is sent to the county extension agent when that point is reached. ATTRA would collect such information and make it available in a systematic way through its proposed centralized data base system.

TVA is moving ahead rapidly on its plan to encourage regional research and development of resource management technologies and community models for transfer purposes. Their work in the community development and nitrogen fixation areas is useful information which would be a part of the proposed ATTRA system. It is not currently put into USDA's data system on a regular basis.

If ATTRA were to receive the $2.16 million I have requested for the program in FY 1988, the budget would cover the establishment of five basic program components: technology transfer, data base development, practitioners advisory group, training and publications, and special projects. The following is a summary of the current status of these components and their description if a $2.16 million level was appropriated for FY 1988.

Technology Transfer : ATTRA has begun start-up. Ten staff members are being hired to work at Agricenter International, Memphis, Tennessee. Specialists on the staff will respond to calls on three toll-free, phone lines, beginning July 1, 1987. Start up activities also include staff training, gathering materials, acquiring access to certain data bases, and developing contacts and referrals so that the staff will be fully prepared to handle incoming calls. These data gathering activities will also serve as the basis for estblishing the ATTRA data base in FY 1988. The ATTRA grant for FY 1987 was not awarded until January 19, 1987. Therefore, the program will only operate at full capacity for about six months, setting up and providing the basic technology transfer service. To provide this service for a full year will require $899,000.

Data Base Development: As envisioned in the complete ATTRA plan, the centralized data base will be the primary source of information that the ATTRA staff will depend on to answer users' questions quickly and accurately. In 1987, the ATTRA staff will only be able to download from a few public data bases and gather some information materials in a central location.

In FY 1988, work will begin on a complete centralized data base. The data base will serve two functions in addition to providing a ready source of reliable data for the ATTRA staff. The data base will save research time for State Extension Directors, county agents, SCS, NACD, and community planners, and it will also help to avoid duplication in low-input farming and community resource management information gathering and analysis by providing a centralized, readily accessible repository of critically reviewed information.

The ATTRA data base is the central component of the program and will be developed in stages. The first year will be dedicated to careful planning, and the second year is the primary implementation stage. During FY 1988, data base design and construction will include retrieval of informtion from all relevant agency and private sector data bases; identification, acquisition, and analysis of information not currently on data bases but that are relevant and scientifically sound; many planning steps; analytical steps; model development and final testing. This development will be relatively costly in its initial year, because of the scope of work involved. However, the cost is expected to decrease by half in FY 1989.

Practitioners Advisory Group: ATTRA will identify 1500 demonstrations on farms and in rural communities which can provide information and assistance to ATTRA users to enhance the overall transfer process. Incorporating this network in ATTRA will provide a unique resource of practical information.

Training and Publications: Training and publications are necessary for a complete application of the ATTRA transfer process. ATTRA users including Extension, SCS, and community planners will use the ATTRA information more effectively after receiving training in the technical areas and approaches to problem solving. Publications are a cost-effective way to consolidate and present information developed in response to the needs of ATTRA users.

Special Projects: ATTRA will sponsor several special projects in order to devote extra attention to topics of particular interest or needs.

NCAT urges the Agriculture Appropriations Committee and the Congress to fund ATTRA at the requested $2.16 million so that ATTRA can offer this country high quality, rapid, up-to-date technical and business assistance on low-input farm and community resource management technologies. ATTRA is a direct response to the rural communities calling for help, information, and assistance in these technology areas. ATTRA can provide sound, money-saving information so that farmers and rural communities can make the most of their own efforts and resources.

NCAT also supports the funding of a far greater effort in research and demonstration of low input farm technologies. There is a need for more testing, more basic and applied research in many areas related to the nutrient cycle; rotational management alternatives and their impact on weed control, drought protection, soil tilth, and pest control. Support for such research is needed by this Committee. That concludes my remarks. Thank you.

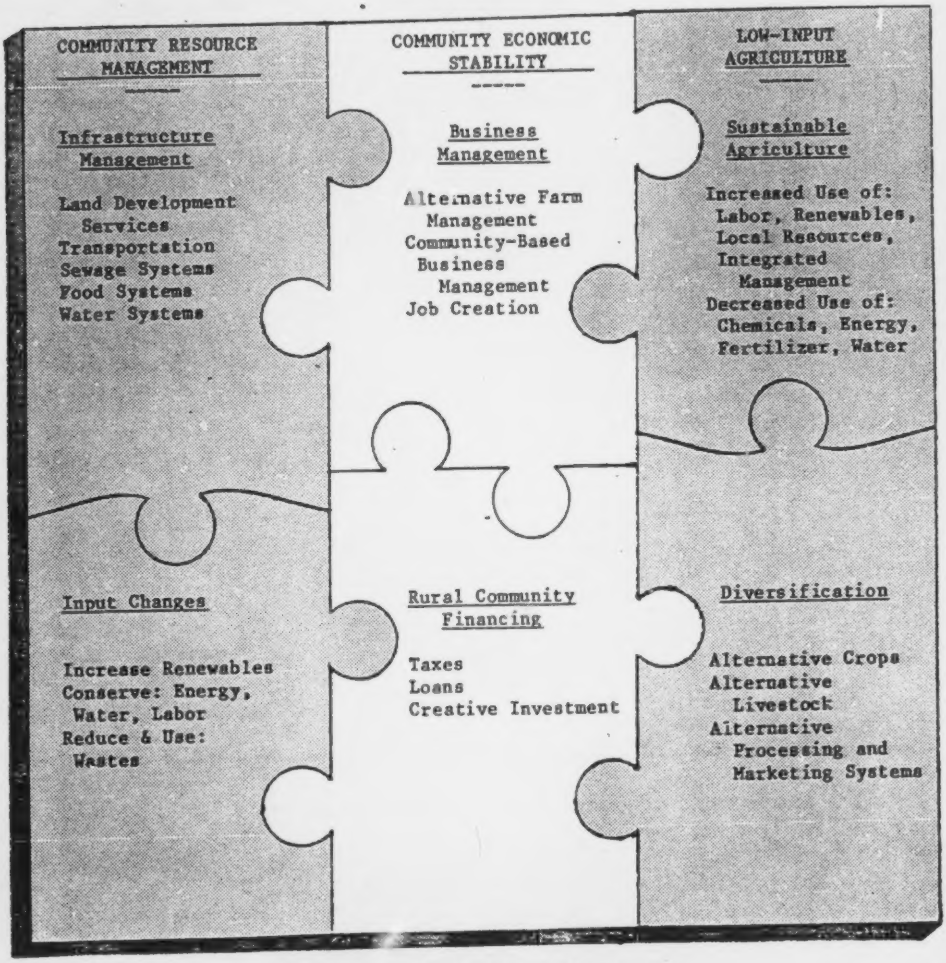
ATTRA

Appropriate Technology Transfer for Rural Areas

to encourage

Sustainable Rural Communities

through


COMMUNITY RESOURCE MANAGEMENT
Infrastructure Management
Land Development Services
Transportation
Sewage Systems
Food Systems
Water Systems
Input Changes
Increase Renewables
Conserve: Energy, Water, Labor
Reduce & Use: Wastes
COMMUNITY ECONOMIC STABILITY
Business Management
Alternative Farm Management
Community-Based Business Management
Job Creation
Rural Community Financing
Taxes
Loans
Creative Investment
LOW-INPUT AGRICULTURE
Sustainable Agriculture
Increased Use of: Labor, Renewables, Local Resources, Integrated Management
Decreased Use of: Chemicals, Energy, Fertilizer, Water
Diversification
Alternative Crops
Alternative Livestock
Alternative Processing and Marketing Systems

Ncat the National Center for Appropriate Technology

ATTRA BUDGET SUMMARY — FY 88 — (Second Year)

COST CATEGORY	Task #1	Task #2	Task #3	Task #4	Task #5	TOTAL HRS	BURDENED RATE**	TOTAL COST
Direct Labor:								
Program Manager	1240	520	100	100	120	2080	51.49	$107,101
Water Cons. Spec.	1980	0	50	0	50	2080	36.08	$75,040
Agronomist	1980	0	50	0	50	2080	36.08	$75,040
Sust. Ag. Spec.	1980	0	50	0	50	2080	36.08	$75,040
Comm. Land/Water Spec.	1980	0	50	0	50	2080	33.50	$69,680
Comm. Bus. Mngt Spec.	1980	0	50	0	50	2080	33.50	$69,680
Crop Diversif. Spec.	1980	0	50	0	50	2080	33.50	$69,680
Farm Mkt. Spec.	1980	0	50	0	50	2080	33.50	$69,680
Info. Spec.	1980	0	50	0	50	2080	34.79	$72,360
Resource Spec.	1980	0	50	0	50	2080	30.92	$64,320
Clerical	4160	0	520	520	520	5720	24.12	$137,966
Snr. Syst. Eng.	0	2496	0	0	0	2496	48.96	$122,208
Programmer	0	2288	0	0	0	2288	28.35	$64,856
Data Entry	0	26400	0	0	0	26400	15.46	$408,185
Lib./Writer	0	9768	0	0	0	9768	32.21	$314,642
Training/Pubs Mngr.	0	0	0	1040	0	1040	38.65	$40,200
						TOTAL DIRECT LABOR:		$1,835,679
Other Direct Costs:								
TVA Agriculture Spec.	$10,000							$10,000
Univ. of TN. Ext.	$20,000							$20,000
TN. State Extension	$10,000							$10,000
Resource Consultants	$15,000		$3,000		$7,000			$25,000
Special Mat. & Sup.	$5,000			$10,000				$15,000
Special Equipment	$10,000			$10,000				$20,000
Travel	$55,000		5000					$60,000
MicroComp. Network		100000						$100,000
Comp. Sys. Consulting		25000						$25,000
Data Base Access		20000						$20,000
Publications		20000						$20,000
						TOTAL OTHER COSTS:		$325,000
						TOTAL ALL COSTS:		$2,160,679

**\ Burdened Rate Includes Salary, Fringe Benefits, Overhead, G&A, and Fee.

ATTRA BUDGET — FY 88 — (Second Year)

TASK 1 - Operation of Technology Transfer Program

Direct Labor:

Labor Category	Hours	Burdened Rate	Cost
Program Manager	1240	51.49	$63,849
Water Cons. Spec.	1980	36.08	$71,432
Agronomist	1980	36.08	$71,432
Sust. Ag. Spec.	1980	36.08	$71,432
Comm. Land/Water Spec.	1980	33.50	$66,330
Comm. Bus. Mngt Spec.	1980	33.50	$66,330
Crop Diversif. Spec.	1980	33.50	$66,330
Farm Mkt. Spec.	1980	33.50	$66,330
Info. Spec.	1980	34.79	$68,881
Resource Spec.	1980	30.92	$61,228
Clerical	4160	24.12	$100,339
		TOTAL LABOR	$773,914
		18720	

Other Direct Costs:

Description of Other Direct Cost Item(s)	COST
Subcontractors:	
TVA Agriculture Specialist	$10,000
Univ. of TN. Extension	$20,000
TN. State Extension	$10,000
Resource Consultants	$15,000
Special Materials & Supplies	$5,000
Special Equipment	$10,000
Travel	$55,000
TOTAL ODCs	$125,000
TOTAL TASK #1 COST	$898,914

ATTRA BUDGET — FY 88 — (Second Year)

TASK 2 - Development of ATTRA Data Base
(work for 12 months)

Direct Labor:

Labor Category	Hours	Burdened Rate	Cost
Program Manager	520	51.49	$26,775
Snr. Syst. Eng.	2496	48.96	$122,208
Programmer	2288	28.35	$64,856
Data Entry	26400	15.46	$408,185
Lib./Writer	9768	32.21	$314,642
		TOTAL LABOR	$936,666

Other Direct Costs:

Description of Other Direct Cost Item(s)	COST
Micro Computer Network (12 stations - Dedicated)	$100,000
Computer Systems Consulting	$25,000
Data Base Access	$20,000
Publications	$20,000
TOTAL ODCs	$165,000
TOTAL TASK #2 COST	$1,101,666

ATTRA BUDGET — FY 88 — (Second Year)

TASK 3 - Development of Practitioners Advisory Group
(Identify 1500 practitioners)

Direct Labor:

Labor Category	Hours	Burdened Rate	Cost
Program Manager	100	51.49	$5,149
Water Cons. Spec.	50	36.08	$1,804
Agronomist	50	36.08	$1,804
Sust. Ag. Spec.	50	36.08	$1,804
Comm. Land/Water Spec.	50	33.50	$1,675
Comm. Bus. Mngt Spec.	50	33.50	$1,675
Crop Diversif. Spec.	50	33.50	$1,675
Farm Mkt. Spec.	50	33.50	$1,675
Info. Spec.	50	34.79	$1,739
Resource Spec.	50	30.92	$1,546
Clerical	520	24.12	$12,542
		TOTAL LABOR	$33,089

Other Direct Costs:

Description of Other Direct Cost Item(s)	COST
Travel	$5,000
Resource Consultants	$3,000
TOTAL ODCs	$8,000
TOTAL TASK #3 COST	$41,089

ATTRA BUDGET — FY 88 — (Second Year)

TASK 4- Publications and Training Workshops
(2 publications, 4 workshops)

Direct Labor:

Labor Category	Hours	Burdened Rate	Cost
Program Manager	100	51.49	$5,149
Training/Pubs Mngr.	1040	38.65	$40,200
Clerical	520	24.12	$12,542
		TOTAL LABOR	$57,892

Other Direct Costs:

Description of Other Direct Cost Item(s)	COST
Materials And Supplies	$10,000
Equipment	$10,000
TOTAL ODCs	$20,000
TOTAL TASK #4 COST	$77,892

ATTRA BUDGET — FY 88 — (Second Year)

TASK 5 - Special Projects

Direct Labor:

Labor Category	Hours	Burdened Rate	Cost
Program Manager	120	51.49	$6,179
Water Cons. Spec.	50	36.08	$1,804
Agronomist	50	36.08	$1,804
Sust. Ag. Spec.	50	36.08	$1,804
Comm. Land/Water Spec.	50	33.50	$1,675
Comm. Bus. Mngt Spec.	50	33.50	$1,675
Crop Diversif. Spec.	50	33.50	$1,675
Farm Mkt. Spec.	50	33.50	$1,675
Info. Spec.	50	34.79	$1,739
Resource Spec.	50	30.92	$1,546
Clerical	520	24.12	$12,542
		TOTAL LABOR	$34,118

Other Direct Costs:

Description of Other Direct Cost Item(s)	COST
Resource Consultants	$7,000
TOTAL ODCs	$7,000
TOTAL TASK #5 COST	$41,118

STATEMENT OF JOHN BARRINGER

Mr. Chairman, Senators, I thank you for the opportunity to testify before this Committee. My name is John Barringer. I am the President of Agricenter International in Memphis, Tennessee. I am here for two purposes, to personally thank this Committee for their willingness to support the ATTRA program at Agricenter International by including $500,000 for it in the FY1987 USDA budget, a level which has made start up possible in this year.

I am here, furthermore, to request that the Committee move that level up to $2.16 million in FY 1988 so that the toll-free lines can continue to operate and the data base component of the ATTRA program is able to be implemented. We are eager at Agricenter to continue playing the host to this program managed by the National Center for Appropriate Technology. Its fits well with our goals to be the fulcrum of the best educational conferences, shows, and displays of new thinking and innovation in the agricultural field.

Agricenter International continues to fill its 1000 acres of land and its show buildings with a broad array of new ideas, including aquaculture, hydroponics, beneficial insects, drip irrigation, and conservation tillage practices. We have spent this last year, our first in operation, in a combination of efforts to bring thinking and technology and business and education closer together through our international conferences and shows.

ATTRA will be operating out of our main building and will help add to the dynamic nature of our services. We look forward to working with the ATTRA staff, who are beginning to come on board at this moment, to assist them in their efforts to offer the public useful, rapid information on low input farming and community resource management.

One of the constant calls for information that we at Agricenter International have had is for a centralized service just like ATTRA will perform. But the data base component is critical to the rapid acquisition of the best information to be offered those calling in on the toll-free lines of ATTRA. For this reason, I am here today to ask that you bring ATTRA up to its full potential and its needed capacity by funding this data base portion of the overall ATTRA plan.

NCAT is making the most of the $480,000 it received from the Extension Service to get the staff to a working level so the toll-free lines can be opened on July 1, 1987. But the back up of the entire data base component will be needed by the new fiscal year. The staff will have access to a great deal of information even so, but the idea for the best centralization of all the good information and the making it readily available in a rapid manner is made possible with a large data base system.

We support the need for such a system, and we at Agricenter International encourage you all to come see us. Maybe when the toll-free lines open up in July you could come visit and see ATTRA working at Agricenter International. We are doing our best to help agricultural trade and education in this country.

Thank you. That concludes my remarks.

BRIEF RECESS

Senator SASSER. The chairman, Senator Burdick, is on his way back. He will be back here very shortly. I am going to recess the committee, subject to the call of the Chair, which should come in just a few moments.

[A brief recess was taken.]

Senator BURDICK. The subcommittee will come to order.

Our next witness is Mary J. Seccombe, president of the Western Resource Conservation and Development Association. Welcome to the subcommittee.

WESTERN RESOURCE CONSERVATION AND DEVELOPMENT ASSOCIATION

STATEMENT OF MARY J. SECCOMBE, PRESIDENT

Ms. SECCOMBE. Thank you, Mr. Chairman.

I am president of the Western Resource Conservation and Development Association, and I am here on behalf of the association this afternoon to testify on the Resource Conservation and Development Program.

I am sure you are aware by now that the administration has zero funding in the budget for the RC&D program again this year, as well as the Great Plains program, watershed programming, ACP, and a number of others.

We feel that it is a grassroots program, and it is a very popular program with the local people. It is probably one of the best programs that the Soil Conservation Service administers. Of all the programs going, dollar for dollar, the administration more than gets its money's worth out of this program.

In the last few months, there was an evaluation done by the Soil Conservation Service of all RC&D programs. We, at the local level, had to fill out forms and answer questions. Then this information was compiled by the Soil Conservation Service, and just to give you an idea of what came out of that:

There were 166,890 staff-days of technical assistance that were utilized to complete 2,190 measures. There was $670 million of financial nonfederal assistance that was expended; 70 percent came from nonfederal sources; 28 percent came from other federal sources; and 2 percent came from the RC&D program.

I think that one of the big things is that there were 57,946 permanent jobs that were created by the RC&D program. There were 300 jobs created per each RC&D area in the United States. This is just to show you how well this program has done economically.

In the 1985 farm bill, they have three new programs, the CRP program, and sodbuster and swampbuster programs. The administration has taken the stand that in order to fund these programs, the base programs for conservation have to be done away with.

We think that that is wrong. We feel that the base programs should be funded first and foremost. Then, if there is money left, or they should appropriate more money to take care of those new programs, the sodbuster, the swampbuster, and the CRP programs that they wish to institute.

The technical assistance aspect is in dire need right now, but because of the new programs the other programs are suffering.

So we urge you, Senator Burdick, and the other members of the committee, please support the RC&D program. It is one of the better programs we have. It is run by local people, and we know our own problems, and we take care of our own areas. I think that we are doing a tremendous job with the number of dollars that you have given to us over the years. We can hold the line, and we would very much appreciate it.

Thank you

Senator BURDICK. Thank you.

When the Resource Conservation and Development Program was initiated in 1954, the emphasis was placed on conservation, and not development in rural communities. As you noted in your testimony, the administration proposes to eliminate almost $26 million in funding available for the SCS, and resource conservation and development assistance for local communities. The major effort to implement the Conservation Reserve Program is underway.

Ms. SECCOMBE. We have a program under the Conservation Reserve Program, but I believe that those programs that have been in place should be implemented first, or funded first, because those are important programs, and if we stop the funding for them, we will never again start the programs again, or it will be very difficult because people would lose their interest in them.

The federal funds that we are getting are mostly for technical assistance. This is the one thing that we asked for before. We need full-time coordinators, and we need the secretaries in the offices. This is close to

$15 million in just technical assistance for the program. Then, over and above that is your so-called cost sharing funds for the projects. The states only get maybe $100,000 a year.

In my own RC&D, we have gone to the state of Montana for funding for projects, and we have been successful. So we are looking elsewhere. We are not just coming in to say, dole out the dollars. We are not saying that. We are just asking to keep the funding we have, and to keep the program going for technical assistance.

[The statement follows:]

STATEMENT OF MARY J. SECCOMBE

MR. CHAIRMAN, MEMBERS OF THE SENATE AG APPROPRIATIONS SUBCOMMITTEE, THANK YOU FOR ALLOWING ME TO TESTIFY BEFORE YOU TODAY AS PRESIDENT OF THE WESTERN RESOURCE CONSERVATION AND DEVELOPMENT ASSOCIATION ON BEHALF OF THE RESOURCE CONSERVATION AND DEVELOPMENT PROGRAM. ONCE AGAIN THE ADMINISTRATION HAS SEEN FIT TO LIST THE RC&D PROGRAM FOR PHASE-OUT IN THE 1988 FY BUDGET. ALMOST SINCE ITS INCEPTION, IT SEEMS THAT WE HAVE HAD TO DO BATTLE EACH YEAR TO FIGHT FOR FUNDING FOR THIS PROGRAM, EVEN THOUGH IT IS ONE OF THE MOST POPULAR FEDERAL PROGRAMS ADMINISTERED BY THE SOIL CONSERVATION SERVICE. OF ALL THE PROGRAMS GOING, DOLLAR FOR DOLLAR, THE ADMINISTRATION MORE THAN GETS ITS MONEY'S WORTH OUT OF THIS PROGRAM.

IN A RECENT EVALUATION DONE BY THE SOIL CONSERVATION SERVICE OF ALL RC&D AREAS WITHIN THE UNITED STATES, THE DATA THAT WAS GENERATED BY THIS EVALUATION WAS TRULY ASTOUNDING. IT VERIFIED WHAT WE HAVE BEEN SAYING OVER THE YEARS THAT THIS IS A TRULY OUTSTANDING PROGRAM AND THE ACCOMPLISHMENTS HAVE BEEN GREAT. I HAVE ATTACHED A COPY OF THE FIGURES THAT RESULTED FROM THIS STUDY. FOR INSTANCE, 300 PERMANENT JOBS WERE GENERATED PER EACH RC&D AREA LOCATED IN THE UNITED STATES, MAKING A TOTAL OF OVER 57,546 JOBS. ALSO, FOR EVERY FEDERAL DOLLAR SPENT ON THIS PROGRAM, IT WAS MORE THAN MATCHED BY OTHER FUNDS, SUCH AS STATE MONIES, GRANTS, ETC. AND THESE ARE JUST A FEW OF THE STATISTICS THAT I HAVE ATTACHED TO THIS TESTIMONY. THE NUMBER OF HOURS VOLUNTEERED REALLY COMES THROUGH IN THIS STUDY AND SHOWS THAT IT IS VOLUNTEER AMERICA THAT REALLY MAKES THIS PROGRAM WORK ALONG WITH THE COORDINATORS FOR THIS PROGRAM.

IT REALLY BOGGLES THE MIND THAT A PROGRAM THAT HAS BEEN SO SUCCESSFUL OVER THE YEARS AND THAT IS SO POPULAR WITH THE CONSTITUENCIES THROUGHOUT THE UNITED STATES STILL MANAGES TO END UP ON THE CHOPPING BLOCK EVERY YEAR BY THE ADMINISTRATION. IT IS CERTAINLY VERY HARD TO COMPREHEND WHY THIS KEEPS HAPPENING YEAR AFTER YEAR AFTER YEAR. WE KNOW THAT IT IS ONE OF THE SMALLEST PROGRAMS AS FAR AS FEDERAL DOLLARS GO, BUT AS I STATED, IT IS ONE OF THE MOST SUCCESSFUL FEDERAL PROGRAMS THAT THE UNITED STATES HAS. IT IS MY UNDERSTANDING THAT IN ORDER TO BE ABLE TO FUND THE NEW PROGRAMS CONTAINED IN THE 1985 FARM BILL, SUCH AS THE CONSERVATION RESERVE PROGRAM (CRP), SODBUSTER AND SWAMPBUSTER PROGRAMS, THAT OTHER BASIC, OLDER CONSERVATION PROGRAMS MUST BE SACRIFICIED TO BE ABLE TO COME UP WITH FUNDING FOR THEM, SUCH AS OUR RC&D PROGRAM, THE GREAT PLAINS PROGRAM, THE WATERSHED PROGRAM, ACP, ETC. I DO NOT UNDERSTAND HOW THEY CAN JUSTIFY THIS STAND. I FEEL, AS WELL AS MY PEOPLE IN THE WESTERN RC&D ASSOCIATION, THAT THE OLD PROGRAMS SHOULD HAVE FIRST FUNDING PRIORITY AND THAT IN ORDER TO COMMENCE WORK ON THE NEW PROGRAMS, THAT NEW FUNDING SHOULD BE APPROPRIATED FOR THESE PROGRAMS RATHER THAN SACRIFICING THE OLD PROGRAMS FUNDING TO START UP THE NEW. THE GREAT PLAINS PROGRAM HAS BEEN VERY SUCCESSFUL, AS HAS THE WATERSHED PROGRAM. AND, OF COURSE, OUR RC&D PROGRAM HAS BEEN AND WILL CONTINUE TO BE A VERY SUCCESSFUL PROGRAM AND THOSE OF US WHO ARE INVOLVED WITH THE PROGRAM VOW THAT WILL BE SO.

WE NEED THE FEDERAL APPROPRIATION TO PAY FOR THE COORDINATOR, SECRETARIES AND CLERKS SALARIES TO MANAGE THE RC&D OFFICES AND, OF COURSE, MONEY FOR OPERATING THESE OFFICES. WE RELY ON THESE PEOPLE VERY HEAVILY TO GET THE JOB DONE BY FOLLOW-UP, ETC. WE HAVE BEEN USING A SMALL AMOUNT OF THE FEDERAL APPROPRIATION FOR COST SHARING MONIES FOR PROJECTS, BUT THE BULK OF IT GOES TO KEEP OUR RC&D OFFICES OPERATING WITH TECHNICAL ASSISTANCE, ETC. HOWEVER, THIS IS THE WAY WE ALL WANTED IT FOR WE FELT THAT WITHOUT THE TECHNICAL ASSISTANCE READILY AVAILABLE, WE COULD NOT HAVE A VIABLE RC&D PROGRAM SINCE THE REST OF US ARE VOLUNTEERS WORKING ON OUR OWN TIME,MOST OF US BEING EMPLOYED ELSEWHERE. WE ARE HAPPY TO SEE THAT MORE AND MORE FULL TIME COORDINATORS ARE BEING EMPLOYED, THIS MEANS A GREAT DEAL TO OUR PROGRAM. HOWEVER, ON FUNDING FOR PROJECTS, MORE AND MORE OF US HAVE BEEN TURNING TO OTHER TYPES OF FUNDING BECAUSE OF OUR LIMITED AMOUNT OF FUNDING AVAILABLE AT THE FEDERAL LEVEL. WE HAVE BEEN GOING AFTER STATE FUNDING FOR PROJECTS, GRANT MONIES, ETC.

AND WE HAVE BEEN SUCCESSFUL IN DOING THIS BECAUSE OF THE TYPES OF PROJECTS WE HAVE BROUGHT BEFORE THESE GROUPS. MORE AND MORE OF OUR PEOPLE ARE LEARNING GRANTSMANSHIP IN ORDER TO BE ABLE TO WRITE PROPOSALS TO LOOK FOR GRANTS AND OTHER FUNDING FOR PROJECTS. SO, YOU CAN SEE THAT WE ARE NOT RELYING ENTIRELY ON THE FEDERAL DOLLARS FOR PROJECTS; WE DO, AND I STRESS WE DO NEED THE FEDERAL FUNDING TO MAINTAIN OUR TECHNICAL ASSISTANCE IN OUR RC&D OFFICES. WE HAVE BEEN SUCCESSFUL IN GAINING OTHER MONIES FOR PROJECTS, SUCH AS STATE FUNDING FOR A WEED CONTROL PROGRAM, TREE REFORESTATION PROJECT, HEAVY TOXIC METALS PROJECT WHERE WE ARE TRYING TO RECLAIM AGRICULTURAL LAND DAMAGED BY MINING, ETC. OUR RC&D PROGRAM IS MORE ON-GOING AND VIABLE NOW THAN IT HAS EVER BEEN IN THE HISTORY OF THE PROGRAM BECAUSE WE ARE GOING FARTHER AFIELD AND NOT RELYING ON FEDERAL FUNDING ENTIRELY AND MORE AND MORE PEOPLE ARE LEARNING ABOUT OUR PROGRAM BECAUSE OF IT.

THEREFORE, IT IS VERY HARD FOR US TO UNDERSTAND THE ADMINISTRATION PHASING THE PROGRAM OUT, WITH THE EVALUATION FIGURES PROVING HOW SUCCESSFUL THE PROGRAM REALLY IS.

WE HAVE COME TO YOU IN THE PAST FOR YOUR SUPPORT AND THANKS TO YOU AND THE OTHER MEMBERS OF YOUR COMMITTEE, WE HAVE BEEN SUCCESSFUL IN RESTORING THE FUNDING FOR THIS PROGRAM YEAR AFTER YEAR. WITHOUT YOUR SUPPORT OUR PROGRAM WOULD HAVE BEEN PHASED OUT LONG AGO. I URGE YOU, THEREFORE, ONCE AGAIN YEAR THIS TO FUND AND TO SUPPORT THIS VERY WORTHWHILE PROGRAM. I KNOW WE ARE STILL FACING A HUGE DEFICIT, BUT PROGRAMS SUCH AS OURS HELP NOT HINDER OUR ECONOMY BY EMPLOYING MORE PEOPLE AND BY PUTTING MORE MONEY BACK INTO THE ECONOMY. I HAVE ATTACHED THE FIGURES GENERATED BY THE EVALUATION DONE BY THE SOIL CONSERVATION SERVICE OF THE RC&D PROGRAM, AND I AM SURE YOU WILL FIND IT MOST INTERESTING.

I SINCERELY REQUEST YOU TO GIVE EVERY CONSIDERATION TO FUNDING THE RC&D PROGRAM AT LEAST AT THE LEVEL OF FUNDING WE HAVE AT THE PRESENT TIME, WHICH IS $26.1 MILLION. WE CERTAINLY COULD USE SOME EXTRA FUNDING, BUT IN THESE TIMES WE WILL SETTLE FOR THE SAME FUNDING WHICH WE ARE NOW OPERATING UNDER. I WOULD ALSO URGE YOU TO FUND THE GREAT PLAINS PROGRAM, WATERSHED PROGRAM, ACP, COOPERATIVE EXTENSION SERVICE AND OTHER AGRICULTURAL PROGRAMS SO DEVASTATED BY THE CUTS AND PHASE OUTS MADE BY THE ADMINISTRATION.

I WANT TO THANK YOU ON BEHALF OF THE WESTERN RC&D ASSOCIATION, INC. FOR YOUR PAST SUPPORT FOR WITHOUT IT, WE WOULD NOT EXIST TODAY AND THANK YOU FOR THE SUPPORT WE KNOW WE WILL RECEIVE AGAIN THIS YEAR FROM THIS COMMITTEE. THANK YOU FOR ALLOWING ME TO TESTIFY BEFORE YOU TODAY ON THIS PROGRAM.

ATTACHMENT

RC&D PROGRAM EVALUATION

THREE ISSUES IDENTIFIED

ISSUE I. WHAT IMPACTS ARE CREATED BY/THROUGH THE RC&D PROGRAM?

ISSUE 2. WHAT IS THE LEVEL OF LOCAL SUPPORT FOR RC&D PROGRAM?

ISSUE 3. DOES THE PROGRAM MEET THE NEEDS AND OBJECTIVES OF THE SPONSORS?

ISSUE I. A REVIEW OF THE RC&D DATA BASE COVERING ALL MEASURES COMPLETED DURING THE PERIOD OCTOBER I, 1983 THROUGH MARCH 31, 1986 SHOWED THE FOLLOWING:

I. INPUTS

A) 166,890 STAFF DAYS OF TECHNICAL ASSISTANCE WERE UTILIZED TO COMPLETE 2190 MEASURES.

FINDINGS: I) SCS PROVIDED 32 PERCENT

2) LOCAL NONFEDERAL SOURCES PROVIDED 26 PERCENT

3) VOLUNTEERS PROVIDED 26 PERCENT

4) OTHER FEDERAL AGENCIES PROVIDED 16 PERCENT

B) $670 MILLION OF FINANCIAL NONFEDERAL ASSISTANCE WAS EXPENDED.

FINDINGS: 1) 70 PERCENT CAME FROM NONFEDERAL SOURCES

2) 28 PERCENT CAME FROM OTHER FEDERAL SOURCES

3) 2 PERCENT CAME FROM THE RC&D PROGRAM

2. OUTPUTS

A) 2,190 MEASURES WERE COMPLETED; 435 WERE IN THE IMPLEMENTATION PHASE; AND, 204 MEASURES WERE CANCELLED.

FINDINGS: 93 PERCENT OF THE MEASURES HAVE BEEN COMPLETED.

B) 35,665 TEMPORARY JOBS WERE CREATED; 57,946 PERMANENT JOBS WERE CREATED OR RETAINED.

FINDINGS: 300 PERMANENT JOBS CREATED OR RETAINED PER RC&D AREA.

C) DAMAGE REDUCTION

I. $5.7 MILLION IN ANNUAL DAMAGE REDUCTION FROM EROSION, SEDIMENT, AND/OR FLOODING.

2. 1.3 MILLION TONS OF EROSION AND SEDIMENT REDUCTION PER YEAR. MEASURES CONTROL 76 PERCENT OF THE ESTIMATED EROSION, SEDIMENTATION, AND/OR FLOODING PROBLEMS.

3. DISTRIBUTION OF DOLLAR BENEFITS

   A) 38 PERCENT ENVIRONMENTAL

   B) 36 PERCENT ECONOMIC

   C) 21 PERCENT SOCIAL

   D) 5 PERCENT OTHER

FINDINGS: 1) WITHIN RC&D MEASURES, THE PERCENT DAMAGE REDUCTION FROM COMPLETED MEASURES IS SIGNIFICANT.

2) 74 PERCENT OF THE VALUE OF DAMAGE REDUCTION IS TO ENVIRONMENTAL AND ECONOMIC GOALS AND OBJECTIVES.

D) WATER CONSERVATION ACTIVITIES BENEFITTED 48,827 ACRES.

ISSUE 2. A SURVEY OF RC&D VOLUNTEER ACTIVITIES DURING 1983 REVEALED THE FOLLOWING:

1. THE RANGE OF SERVICE WAS 1 TO 22 YEARS; MEAN OF 7 YEARS.

2. 33 PERCENT WERE FARMERS, 40 PERCENT WERE MANAGERS.

3. 75 PERCENT WERE BETWEEN AGES OF 36 AND 65.

4. 81 PERCENT HELD JOBS IN ADDITION TO VOLUNTEER WORK.

5. OVER 50 PERCENT SERVED ON A COMMITTEE.

6. 50 PERCENT PERFORMED AT LEAST THREE SERVICES.

7. VOLUNTEERS PROVIDED $30.6 MILLION WORTH OF SERVICES IN 1983 COMPARED TO THE RC&D APPROPRIATION OF $29.9 MILLION.

FINDINGS: LOCAL SUPPORT IS VERY STRONG; IT MATCHED THE RC&D EXPENDITURES DOLLAR FOR DOLLAR.

ISSUE 3.

1. EACH COUNCIL COMPLETED A WORKSHEET TO DETERMINE THE EFFECTIVENESS OF THE PROGRAM.

   A) 32 PERCENT ARE EXTREMELY SATISFIED

   B) 48 PERCENT ARE MODERATELY SATISFIED

   C) 11 PERCENT ARE SATISFIED

   D) 7 PERCENT ARE MODERATELY DISSATISFIED

E) 0.5 PERCENT ARE EXTREMELY DISSATISFIED

F) 1.5 PERCENT DID NOT RESPOND

FINDINGS: 91 PERCENT OF THE COUNCILS ARE SATISFIED WITH THE EFFECTIVENESS OF THE PROGRAM IN MEETING LOCAL NEEDS AND OBJECTIVES.

2. THE TOP FOUR STRENGTHS OF THE PROGRAM ARE:

1) LOCAL INPUT (60 PERCENT)

2) COOPERATION OF FEDERAL, STATE, AND LOCAL AGENCIES (28 PERCENT)

3) A METHOD TO SOLVE PROBLEMS (28 PERCENT)

4) ABILITY TO ORGANIZE PROJECTS WITH OTHERS (26 PERCENT)

3. THE TOP FOUR WEAKNESSES OF THE PROGRAM ARE:

1) LACK OF ADEQUATE FUNDING (50 PERCENT)

2) BUDGET INSTABILITY FOR PROGRAM (24 PERCENT)

3) PLANNING PROCESS TOO LONG AND COMPLEX (21 PERCENT)

4) PART-TIME OR NO COORDINATOR (19 PERCENT)

2. THE TOP FOUR STRENGTHS FOR MODIFYING, REDIRECTING, OR TERMINATING THE PROGRAM:

   1) MORE FUNDING (63 PERCENT)

   2) MORE LOCAL INFLUENCE ON SETTING PRIORITIES (30 PERCENT)

   3) SIMPLIFY THE PLANNING PROCESS (19 PERCENT)

   4) PROVIDE FULL TIME COORDINATORS (16 PERCENT)

NATIONAL CATTLEMEN'S ASSOCIATION

STATEMENT OF JACK DAHL, PRESIDENT

ACCOMPANIED BY TOM COOKE

Senator BURDICK. Our next witness will be Mr. Jack Dahl, president of the National Cattlemen's Association.

Welcome to the committee, Mr. Dahl.

Mr. DAHL. Mr. Chairman, I am Jack Dahl, president of the National Cattlemen's Association. I am a rancher from North Dakota. I am joined here today by Mr. Tom Cooke of our Washington, DC, staff, who is in charge of policy development.

On behalf of the National Cattlemen's Association, which represents about 30,000 men and women, I appreciate the opportunity to present our views on this particular aspect of the USDA budget for fiscal year 1988. I do have a prepared statement, and I would ask that it be submitted for the record.

Senator BURDICK. It will be included in full in the record.

Mr. DAHL. The National Cattlemen's Association firmly supports efforts by Congress and the administration to reduce federal spending. The long-term success of agriculture and most other industries is at stake. The federal government competes with private sources for capital and inevitably raises the cost of doing business.

In the comments that follow, the nation's cattlemen clearly indicate that they are willing to take cuts in government programs conducted in part for their benefit. We believe that this can be done without harm to our industry or to the public provided that the programs and services of the highest priority be kept in tact and those of low priority be deleted or reduced.

By and large, our comments pertain to the budget for the U.S. Department of Agriculture.

NCA supports the proposed budget increases for ARS of $24.4 million. While keeping with its basic research mission, ARS has been very responsive to the research needs of the industry, including the cattle industry.

While we remain supportive of ARS due to their general responsiveness to industry and the efforts to streamline administrative procedures, we nevertheless are extremely disappointed that the appropriation of funds to animal science is continually substantially less than similar appropriations to plant science.

If funds for plant science are to be increased disproportionately compared to animal science, then ARS should at least place additional emphasis on range plant research, an area that has been neglected. Research on the basic physiology and morphology of range plants is needed.

As in the proposed budget for ARS, the proposed budget for CSRS illustrates an inequality between animal and plant science. In this case, fiscal year 1987 funding for plant sciences was nearly threefold higher than for animal science. We request that Congress direct CSRS to develop a logical and satisfactory explanation of this inequity.

The livestock inventory data collected and reported by the National Agricultural Statistics Service is a valuable service to the nation's cattlemen. Producers make short- and long-term business decisions based on trends indicated in the reports. Therefore, NCA supports the $4.7 million funding increase proposed for NASS.

However, NASS has been unresponsive to NCA's concerns that recent changes in the statistical and reporting methods will result in data that is of limited or no use to cattlemen.

If the needs of the industry for data continue to be ignored, it will become increasingly difficult for NCA to support funding for NASS in the future.

Congress has provided literally billions of dollars for agricultural export assistance programs, but none of this money has been directed to provide the necessary manpower to carry out these programs. The Food Security Act of 1985 created 12 export programs, such as export enhancement, trade export assistance, and the dairy termination program, but no provisions for more personnel.

In addition to these export programs, the FAS is addressing trade policy issues of equal importance. We have the Canadian free-trade talks, the Uruguay Round, and numerous bilateral talks coming up, including beef talks with Japan.

FAS staff-years have actually declined 8 percent since fiscal year 1981. Overseas posts are facing cuts because of the decline of the dollar. There are no funds available for trade offices or trade shows. The FAS is not one place to be cutting personnel.

The President's budget proposes the implementation of user fees in several program areas to cover the costs of these programs. The NCA has established policy that opposes user fees for programs that are mandated by law for the public benefit. The proposed user fees for meat inspection is a perfect example of the kind NCA opposes.

In addition to our basic opposition to meat inspection fees, we object to the FSIS proposal to charge $3.40 per head slaughtered. The FSIS believes this assessment will be passed through the system. We believe this fee will be unfairly passed back, not forward, to the cattle producer. Other user fee proposals must be evaluated on their individual merit.

The NCA is in general support of the APHIS budget proposal. There are a couple of areas, however, where we have some concerns.

The administration proposes to keep funds for the Brucellosis Eradication Program at about the same level as previous years. We believe the agency should have ample discretionary authority to distribute these funds where it will do the most good to carry out and accomplish the objectives and goals of the program.

We are pleased that funding for the Screwworm Program has been increased slightly. This successful effort has benefited the livestock industry, particularly in the Southwest as well as Mexico. We hope the screwworm-free barrier can be moved even further south.

The National Cattlemen's Association was supportive of transfer of the Animal Damage Control Program from the Department of the Interior to the Department of Agriculture. We are pleased that the transfer is completed. We do hope the Secretary of Agriculture will allot $3.8 million to be expended in fiscal year 1988 for the development of operational field programs, including all currently authorized control methods.

We also believe there should be a contingency fund. This fund would be available for exotic and other disease outbreaks, or other unforeseen emergencies.

Mr. Chairman, we very much appreciate the opportunity to have input. If you have any questions, we will be very happy to give you the answers.

Senator BURDICK. Mr. Cooke, do you have a statement?

Mr. COOKE. No, sir.

Senator BURDICK. Recently, the committee received testimony from the Commodity Futures Trading Commission about its enforcement investigational activities. Repeatedly, questions have arisen about the variability of cattle futures. Will you please comment on the National Cattlemen's Association's position on this subject, and how you are cooperating with the CFTC?

Mr. DAHL. Mr. Chairman, the issue of the cattle futures and the cattle industry was really brought to light by the situation that the cattle industry found itself in as a result of the dairy termination program a little over a year ago.

Our position at the present time is that we are developing a task force, in the last 2 months, that has been meeting a number of times and with the GAO that Congress requested to do an investigation of the Cattle Futures Marketing Program.

At the present time, we are putting together more of a factfinding project. We are directed by our association that if the GAO does not meet the deadline by November 10 of this year, we will negotiate in good faith to make appropriate changes in the regulations. We will direct our industry to come to Congress and ask for a change.

Senator Burdick. When you reach a more definitive position, let us know, will you?

Mr. Dahl. We will be looking to you for guidance and help.

Senator Burdick. Thank you very much.

[The statement follows:]

STATEMENT OF JACK DAHL

The National Cattlemen's Association is the national spokesman for all segments of the nation's beef cattle industry--including cattle breeders, producers, and feeders. The NCA represents approximately 230,000 professional cattlemen throughout the country. Membership includes individual members as well as 49 affiliated state cattle associations and 23 affiliated national breed associations.

INTRODUCTION

The National Cattlemen's Association firmly supports efforts by Congress and the Administration to reduce Federal spending. The long-term success of agriculture and most other industries is at stake. The Federal government competes with private sources for capital and inevitably raises the cost of doing business.

In the comments that follow, the nation's cattlemen clearly indicate that they are willing to take cuts in government programs conducted in part for thier benefit. We believe that this can be done without harm to our industry or to the public provided that the programs and services of the highest priority be kept intact and those of low priority be deleted or reduced.

By and large, our comments pertain to the budget for the United States Department of Agriculture.

RESEARCH AND EDUCATION

A. Agricultural Research Service (ARS)

NCA supports the proposed budget increases for ARS of $24.4 million. While keeping with its basic research mission, ARS has been very responsive to the research needs of industry, including the cattle industry.

ARS continues to operate in over 130 locations in this country and abroad. This number of locations is excessive and leads to inefficiency. Certain ARS locations are held together by tradition and political support. We urge Congress to seek the advice of ARS administrators and agricultural producers to identify those ARS locations which should be closed and/or merged with more substantial ARS facilities. In these situations, the facilities lack a "critical mass" of scientists to function productively. Savings from such reorganization could be applied to high priority research needs.

While we remain supportive of ARS due to their general responsiveness to industry and the efforts to streamline administrative procedures, we nevertheless are extremely disappointed that the appropriation of funds to animal science is continually substantially less than similar appropriations to plant science. Farm income from the sale of animals is approximately equal to income from the sale of plant products. Yet plant research receives more than double the amount of support from ARS. This is an inequality that cannot be allowed to continue. It has never been explained to our satisfaction why this disparity exists.

If funds for plant science are to be increased disproportionately compared to animal science, then ARS should at least place additional emphasis on range plant research - an area of research that has been neglected. Research on the basic physiology and morphology of range plants is needed.

B. Cooperative State Research Service (CSRS)

As in the proposed budget for ARS, the proposed budget for CSRS illustrates an inequality between animal and plant science. In this case, FY

'87 funding for plant sciences was nearly three fold higher than for animal science. We request that Congress direct CSRS to develop a logical and satisfactory explanation of this inequity. Meanwhile, we firmly support the $2.7 million increase in animal science research.

The only sources of funding for animal health research (a combination of special grants and sec. 1433 funds) has again been deleted by the Administration. This has become an annual event. Meanwhile, animal health researchers are left in limbo, not knowing from year to year if their research efforts will be supported. This is an especially poor time to discourage long-term investigation into complex disease processes that represent the next frontier in animal health research. A long term and reliable source of funding is desperately needed. Until it is established, funding for animal health research through CSRS must be restored.

C. Extension Service (ES)

The Agricultural Extension Service has served a critical role in the development of American agriculture, and ES can continue to play a critical role if some rather drastic changes are made. Agriculture has become much more sophisticated with a greater reliance on technology. The National Cattlemen's Association agrees with the findings of the Office of Technology Assessment (OTA) report entitled "Technology, Public Policy and the Changing Structure of American Agriculture". The report clearly illustrated the changes that are occurring in agriculture and the changes that will necessarily occur in the future. Greater emphasis will be placed on technology management and information management. If the Extension Service is to secure continued support from the National Cattlemen's Association, it must adapt to these changing needs.

In order to facilitate innovation on the part of the extension service, we recommend the development of a competitive grant program as a means to restore some funding to the Extension Service that has been deleted by the Administration. This would provide the service needed by the more aggressive and innovative extension personnel to develop new programs or tools that could, in turn, be adopted by extension groups in other states. Some states may not have the personnel to create new methods and programs but could easily implement those developed by others.

CROP AND LIVESTOCK REPORTING

A. National Agricultural Statistics Service (NASS)

The livestock inventory data collected and reported by the National Agricultural Statistics Service (NASS) is a valuable service to the nation's cattlemen. Producers make short and long-term business decisions based on trends indicated in the reports. Therefore, NCA supports the $4.7 million funding increase proposed for NASS.

However, NASS has been unresponsive to NCA's concerns that recent changes in the statistical and reporting methods will result in data that is of limited or no use to cattlemen. If the needs of the industry for data continue to be ignored, it will become increasingly difficult for NCA to support funding for NASS in the future.

B. Foreign Agricultural Service (FAS)

The USDA-FAS is a very effective agency with a multitude of responsibilities. In addition to helping sell America's agriculture through market development and product promotion, it must also be responsible for trade policy and commodity analysis. The success of the FAS is its people. With this said, I must say the FAS is sorely understaffed. It is not possible for the FAS to continue to produce at its current level without consideration of increased personnel.

Congress has provided literally billions of dollars for ag export assistance programs, but none of this money has been directed to providing the necessary manpower to carryout these programs. The Food Security Act of 1985 created 12 export programs, such as export enhancement, trade export assistance, and the dairy termination program, but no provisions for more personnel. In addition to these export programs, the FAS is addressing trade policy issues of equal importance. We've got the Canadian free-trade talks, the Uraguay Round and numerous bilateral talks coming up, including beef talks with Japan. FAS staff years have actually declined 8 percent since fiscal year 1981. Overseas posts are facing cuts because of the decline of the dollar. There are no funds available for trade offices or trade shows. The FAS is not one place to be cutting personnel.

MARKETING AND INSPECTION PROGRAMS

A. User Fees

The President's budget proposes the implementation of user fees in several program areas to cover the costs of these programs.

The NCA has established policy that opposes user fees for programs that are mandated by law for the public benefit.

The proposed user fees for meat inspection is a perfect example of the kind NCA opposes.

In addition to our basic opposition to meat inspection user fees, we object to the FSIS proposal to charge $3.40 per head slaughtered. The FSIS believes this assessment will be passed through the system. We believe this fee will be unfairly passed back, not forward, to the cattle producer.

Other user fees proposals must be evaluated on their individual merit.

B. Animal and Plant Health Inspection Service (APHIS)

The NCA is in general support of the APHIS budget proposal. There are a couple of areas, however, where we have some concerns.

The Administration proposes to keep funds for the Brucellosis eradication program at about the same level as previous years. We believe the agency should have ample discretionary authority to distribute these funds to where they will do the most good to carry out and accomplish the objectives and goals of the program.

We do support the continued federal-state cooperative funding efforts for calfhood vaccination. Someday we hope the individual producer will see the merit and benefits to him to calfhood vaccinate at his expense. However, in some states, funding for calfhood vaccination is an important tool toward eradication and we do not believe that now is the time to discontiue funding for this part of the program.

We are pleased that funding for the screwworm program has been increased slightly. This successful effort has benefitted the livestock industry, particularly in the southwest as well as Mexico. We hope the screwworm-free barrier can be moved even further south.

The National Cattlemen's Association was supportive of the transfer of the Animal Damage Control program from the Department of Interior to the Department of Agriculture. We are pleased the transfer is completed. We do hope the Secretary of Agriculture will alot $3.8 million to be expended in fiscal year 1988 for the development of operational field programs, including all currently authorized control methods.

We also believe there should be a contingency fund. This fund would be available for exotic and other disease outbreaks, or other unforeseen emergencies.

NATIONAL DEMOCRATIC POLICY COMMITTEE

STATEMENT OF RONALD S. KOKINDA, DIRECTOR, WASHINGTON OFFICE

Senator BURDICK. Our next witness will be Mr. Ronald S. Kokinda, director of the Washington Office of the National Democratic Policy Committee.

Mr. KOKINDA. Thank you, Mr. Chairman. We appreciate the opportunity to appear here this afternoon.

I want to address my recommendations for agriculture in the context of the severe financial banking crisis which agriculture faces. It is pretty obvious that the agriculture financial system and the Federal Reserve system are coming apart at the seams, and it is highlighted by the moratorium that the Brazilians declared recently. This type of moratorium did not cause the crisis, but it underscores the need for fairly quick action.

New credit, new production, new trade measures are going to be required, if the administration and Congress will act in that direction, or things are going to get much worse. Such measures are going to require debt reorganization, stabilization of the international currency exchange rates, and most of all it is going to require new credit.

In that context, some of the guidelines that we would recommend for dealing with the agricultural situation are to keep the local banks functioning. There is a statement by Lyndon Larouche, who is an advisor to us, that is entitled, "Keep the Banks Functioning," where he outlines certain rules of thumb. The essence of it is to treat nonperforming loans as frozen assets, if such loans would be performing under conditions of economic recovery.

In that context, we would strongly recommend that a moratorium be placed on farm foreclosures. We feel that this is necessary, to declare a moratorium, until certain economic recovery steps can be put into place. We feel that this is necessary in order to avoid two problems. One is that we have to stop the types of buyouts of the whole family farm sector that is going on by the cartels and these other types of entities.

Second, we would strongly recommend against the direction of congressional bailouts of things such as the farm credit system, the same way that we would recommend with the Federal Savings and Loans Insurance Corporation, and these types of entities. If you want to make the depression worse, then you go in the direction of bailouts. We would strongly recommend against that.

We obviously have to maintain orderly income distribution, and the cuts that the administration is proposing making in the farm sector, we strongly reject. They have no relationship to reality.

Part of the recovery package that we feel is needed is to move to a parity system. I would take a different tack than the approach that is taken in the Gephardt bill. We would recommend 90 percent parity, and we would recommend reaching parity by simply passing a law saying that commodities cannot be purchased under such and such a price, rather than attempting to maintain a parity price through federal tax dollars.

I would like to say a couple of things because there are a number of press articles that have come out that say that we are overproducing. Our feeling is that that is nonsense. What we have is a collapse of purchasing power and consumption.

We just did a few rough calculations. If you look at the per capita food requirement, we used the figures of 24 bushels of grain available per capita per year, not just concerns of grain intakes, but indirect grain consumption of meat, milk, eggs, and similar types of animal protein.

Assuming that there are 5 billion people in the world, it led us to reach a figure of 30 billion tons in worldwide annual grain production being required. Probably the best guess of what was produced in 1986 was a little over half of that. So, it is not, again, a question of overproduction, but a question of collapse in consumption.

I would like to conclude by emphasizing the need for more consumption or demand management approach, rather than a supply management approach. The problems with supply management approach is that under current conditions of consumption collapsing and purchasing power collapsing, people are eating what they should be eating. When we look at the AIDS epidemic, it is very clear that we should be extremely concerned at this point in time to make sure that people's protein intake is maintained at levels that will maintain them as healthy individuals, to keep the immune system of individuals from being suppressed.

We have international experts, Dr. John Seale from the Royal College of Medicine in England, saying that AIDS is a species threatening disease, in other words, it has the potential of wiping out the entire human race. We have to use every means available to us to make sure that our immune system is protected.

I thank you, Mr. Chairman. I will be very happy to try to answer your questions.

Senator BURDICK. Thank you very much.

[The statement follows:]

STATEMENT OF RONALD KOKINDA

The subject for Congressional consideration regarding U.S. agriculture in fiscal 1988, is not appropriations as such (neither the proposed reductions, nor 'status-quo'), but emergency measures in the face of the farm sector crisis, which is so severe as to constitute an international food security crisis. The situation has reached such a level of disaster, that the recommended course of action is sweeping and simple:

1. World nutrition levels are collapsing, and domestic nutrition levels are dropping as well, which makes clear that we do not have an oversupply problem, but a drastic drop in purchasing power and consumption. More and better food worldwide is needed to build up peoples' immune systems in the face of AIDS, and the pandemics of other diseases. There is no food glut, but only a passing "appearance" of food surpluses in certain food-exporting nations, because of the collapse in the IMF-based system of production and trade. Therefore, federal measures must be taken to expand food output, to restore our national system of independent farmer-based production, and to repair and expand related infrastucture and industrial supplies.

2. The current failure of the international IMF-based system of debt, currency relations, and trade, shows that the IMF needs to be scrapped, and emergency measures need to be implemented to foster the resumption of production, trade, and the mutual benefit of allies. This requires special domestic banking arrangements -- as indicated by the stated emergency with the savings and loan associations, and the Farm Credit System.

3. Special, related measures must be initiated -- through conference and treaty agreement among western nations -- to restore currency relations and facilitate expanding trade flows. The recent actions of Brazil, Peru, the Sudan, Ecuador and others have opened the door for such a restoration of production-based financial arrangements, whether policy makers in Washington and Wall Street like it or not.

4. Anti-trust investigations and corrections must be undertaken against the special-interest financial and commodities trade cartels that are attempting to gain advantage at this time of international crisis.

1. Produce more food, at parity-related prices.

First, the matter of producing more food. The shortage of food on a world scale is manifest in the mass numbers starving in Africa, and other points of desperate need. A person requires an estimated 24 bushels of grain available each year to supply food for direct and indirect (for meat, milk and eggs) consumption. Multiply the world's 5 billion people times 24 bushels (at about 50 pounds of grain a bushel), and the minimum world grain output objective of 3 billion tons is calculated. The best guess of the world's harvest last year was 1.65 billion tons. Relative to need, this does not represent a glut.

At the same time, carryover grainstocks are temporarily piling up, unused and deteriorating, in the United States, Western Europe, and elsewhere, because of the decline in world food trade. So-called world ending stocks this past year (a large part of which is in the United States) were 385 million metric tons, up from 225 million metric tons in recent years, while millions are starving.

This pile-up of grain occurs simply because it is not going for domestic livestock build-up in the nations where the grain was grown, nor is it going into the international trade pipeline. So there is a temporarily "appearance" of surplus. However, in the name of eliminating "surpluses" that supposedly depress prices to farmers (which, however, the IMF and associated food cartel company interests enforce), policy makers on both sides of the Atlantic are tolerating and promoting the demise of thousands of independent, family-run farms--the bedrock of transAtlantic, and international farm productivity.

Measures must be taken to restore farm income to parity-price related levels, and to provide low interest pcredits to promote production expansion.

2. Emergency measures for domestic banking to guarantee production.

As of the end of March, the plunge in the Dow Jones and the value of the dollar, plus the official recognition of the crisis of the Farm Credit System and other agencies, indicate the obvious dimensions of the Panic now breaking around us. About half of all the banks that have failed in the last few years are farm banks.

The needed approach to take is presented in a policy document, released March 13, by Lyndon H. LaRouche, contender in the 1988 Democratic Party presidential primary, as follows:

"Keep the Local Banks Functioning"
by
Lyndon H. LaRouche

"The Federal government must take new forms of action now, to deal with the rapidly accelerating rate of banking failures.

"First, the government must proceed on the basis of the fact, that most of the banking failures are the fault of neither the banks nor their borrowers. This tidal wave of failures is the result of a general, international financial crsis, combined with a deepening economic depression, which threatens to bring down almost the entirety of the banking system, and other classes of financial institutions.

"Second, the wave of collapse of local banking institutions must be seen as adjunct to liquidation of farms and plant shutdowns. The loss of a large numer of these institutions, during the present economic depression, would represent a major loss of essential structure of the U.S. economy, a loss of strucure which could make an economic recovery very difficult to mobilize.

"Third, under conditions of economic recovery, many of these banks, farms, and industries would be viable economic entities. Since it must be our intent, to make those changes in policy which bring about such an economic recovery, it should also be our policy to save those banks, farms, and industries which would resume economic viability under recovery conditions.

"Therefore, our policy should be, to prevent precipitous collapse of banking institutions, and to take measures to maintain operations of those banks which would become viable under recovery conditions.

"It should be determined, whether it were better to take the appropriate action under the President's emergency power, or whether an emergency, clean bill must be enacted by Congress for this purpose. Were the latter deemed feasible, it were to be preferred, for rather obvious reasons.

"An emergency action under law must provide for: The orderly and efficient determination of which imperiled banking institutions could be successfully reorganized under conditions of economic recovery, and emergency measures of reorganization to provide for the continued operation of banking institutions falling into the latter category.

"The following considerations should be included.

"a. Congress should resolve that a condition of threatened international financial crisis and economic depression exists, and that the government is resolved to effect such changes in current monetary, fiscal, and economic policies as may be needed to begin an immediate and durable economic recovery.

"b. The general approach to financial reorganization should be to classify non-performing assets as ceasing to accrue debt-service charges according to law.

"c. Non-performing loans which might become performing assets, in respect to unpaid principal, under conditions of economic recovery, should be considered as potentially performing loans, and that amount of value of unpaid principal should be classed as a frozen asset. If the bank is solvent on this basis, then the bank should be kept in operation.

"d. If there is no prospect for successful reorganization under conditions of economic recovery, and if greater damage to depositors would result from continuing operations than otherwise, the best mode of liquidation should be adopted.

"The same approach should be adopted, on principle, for the case of foreign non-performing debts. Banks holding loans which are non-performing, should carry balances without accruing debt-service charges, unless the bank should elect to write off the entirety or a portion of this unpaid balance, carrying only some residue as a balance.

"In the case of currently non-performing debts of foreign governments, except in the case of the so-called "least developed nations," it should be assumed that a successful reorganization of payment of either all or a substantial portion of the principal amount of the unpaid balance will occur. In the latter case, the amount of unpaid principal shall be carried as not accuring debt-service earnings, subject to negotiated reduction of this principal.

"The greatest danger at the present time, would be a refusal to recognize that the threat to our banking system is part of a combined economic depression and an international financial crisis with many analogies to that of 1929-1932. If we pretend that there is no economic depression and no spiralling financial crisis, and if we continue to employ policies attuned to assumed normal business conditions, we invite an unnecessary, deep catastrophe. If we recognize that such crises are deepening, and also resolve to launch an economic recovery, the correct treatment of temporarily embarrassed banking institutions follows more or less as a matter of applied common sense."

3. Expand world trade flows.

Congress and the President must enter into negotiations with foreign debtors, to reschedule the repayments of principal amounts of the present debt potentially in default, as described above, in order to make safe for a vast increase in the volume of trade flows. We should stop the trade war approach to food exports, and all other goods. Instead, we should envisage an increase in the annual volume of U.S. exports by $500 billions above 1986 levels, based on pouring in new credits to U.S. farmers and industries, both to supply operating capital needed to produce goods-for-export, and to retool production for such output.

According to a trade proposal by Lyndon LaRouche, "Under this arrangement, no U.S. currency leaves the United States. We do not loan money to foreign nations; we deliver them goods on delayed-payment terms. The money loaned, is issued to the U.S. producers fo such exports, to carry them over the period until they are paid for the exported goods. The object is to provide U.S. exporting industries a minimum of $500 billions a year over the level of export-financing available during 1986."

4. Use anti-trust powers to investigate and clean out cartel controls in government agriculture and trade policies.

It is an open secret and scandal, how a very few number of food trade cartel companies dominate food production and trade policy, to the detriment of national security and the integrity of the Western Alliance. For example, the 'export enhancement' program, which gives government hand-outs direct to the export cartel companies (Cargill, Continental, Garnac/Andre, Bunge, Archer-Daniels-Midland, Louis Dreyfus and a few more) should be stopped. This program does nothing for farmers. Similarly, the farm price support system has been administered in recent years as a subsidy to the grain cartel companies--nominally via a government transfer to the farmer--to have a guaranteed supply of cheap grain. The individuals using government office to further their respective trust interests, such as Undersecretary of Agriculture Daniel Amstutz, the Cargill connection, should be called to account, as the others involved in "private government dealings" through the backdoor have been exposed during "Irangate." Measures need to be taken to reopen international commerce and shipping to independent interests again.

Conclusion:

The spread of AIDS should make clear to anyone the consequences of allowing world agriculture and food supply to sink to the needlessly deteriorating state in which it exists at present. The body's immune system is built out of protein--whose best source is a daily balanced diet, including plenty of animal protein. Yet federal policy has permitted the undermining of the national food output potential of this country to the point where farmers are going bankrupt in mass numbers, and the national cattle and hog inventories are at their lowest levels in 25 years, and food cartel interests lobby for even more cuts in production -- even mandatory cuts.

However, whatever any such evil and malthusian lobby may think, the entire post-war monetary system run by the IMF, World Bank, the Federal Reserve, and similar agencies, is falling apart. This crisis must be used as an opportunity to enact the emergency credit, production and trade measures outlined above to restore our farm sector, and the entire economy of the Western world, to the productivity and growth we need.

NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

STATEMENT OF ROBERT BERGLAND, EXECUTIVE DIRECTOR AND GENERAL MANAGER

ACCOMPANIED BY:

FRANK STORK, CHAIRMAN, STANDING COMMITTEE ON LEGISLATION
TOM SHOWS, VICE CHAIRMAN, STANDING COMMITTEE ON LEGISLATION

Senator BURDICK. Our next witness is Mr. Bob Bergland, executive director and general manager of the National Rural Electric Cooperative Association.

Welcome to the committee, Mr. Bergland.

Mr. BERGLAND. Thank you, Mr. Chairman.

Mr. Chairman, I have a letter dated April 6 to you from us reporting on the handling of the FFP refinancing that you were instrumental in securing a year ago, and I would like to have that made part of the record.

I have a rather detailed statement for the record, and I would like to be able to shorten it in order to save time.

Senator BURDICK. The letter and your statement will be made part of the record.

Mr. BERGLAND. Mr. Chairman, I am accompanied by two of the leaders of the Rural Electric Cooperative Association. They are the chairman and vice chairman of our committee on legislation.

To my right is Mr. Frank Stork, from Missouri, the chairman, and he is also the general manager of our Association of Statewide Electric Cooperatives for the state of Missouri.

To my left is Mr. Tom Shows, the general manager of the Pearl River Valley Electric Power Association in Columbia, MS.

Mr. Chairman, the nearly 1,000 consumer-owned rural electric systems in this country have been hit very hard by the economic crisis that has plagued much of the agricultural and the rural economies. These difficulties have drastically reduced load growth for many of our systems.

In fact, the records show that out of 930 systems nationally, 222 are losing customers every day. This factor, combined with the high cost of constructing new generation plants has resulted in defaults by six generation and transmission cooperatives, what we call G&T's. We are hopeful that these problems can be resolved in a constructive and expeditious manner through mutually beneficial agreements between REA and the G&T's.

Mr. Chairman, we are in trouble. The farm depression, the oil depression, and the mine depression are really tearing up these small towns, and are showing up in the rural electric program, and I know that it is showing up in other forms of business enterprises.

The Administrator, Mr. Hunter, appearing before this committee, has offered some changes in the program, which he recommended to the administration, that we think are very serious mistakes in policy, and I want to just very briefly challenge Mr. Hunter's implicit assumptions.

For example, he says that the rural electric program is done, that it has finished its work. This is simply not true. The rural system serves about 10 percent of the U.S. population, and three-quarters of the land mass, but we have only 5.2 consumers and $5,400 per mile of line compared to 31 consumers and $45,000 per mile for investor-owned utilities, and 65 consumers and $79,100 per mile for municipal utilities. We simply are at a constant and continuing disadvantage because of this density factor coupled with the current depression.

The REA is a national program. Its effectiveness is directly related to the fact that the Congress has never chosen to handicap it with a means test, as Mr. Hunter has suggested, where those cooperatives that are better off are cut off should be cut loose from the national REA, and those that are worse off should be maintained. This would be the end of the REA financing needs.

We know that the municipal utilities are granted certain tax advantages. We know that the publicly owned utilities are granted certain advantages in the bondings, the tax-free bondings. We are not arguing that that ought to be changed. But we are saying that they do get their programs in order to help them serve the consumers, and we need the REA.

We serve all comers. We serve the rich people and the poor people, and that is our role. It comes with the territory. We have to successfully maintain continuing access to the federal government, including REA.

The role of the REA has changed, of course, with the years, as our role has changed, but, Mr. Chairman, the job is simply never done. We believe that it is necessary to provide local assistance in matters of community economic health. We think that this is terribly important, and the case has been made very clear recently with the farm depression. We can see what happens to a community that depends on a single crop.

We are very strongly in favor of a rural economic community development, and we think that this is what we have done, but under the Administrator's proposal, he would end support for what he calls "recreational areas and resorts." The truth is, Mr. Chairman, that we have a number of cooperatives that have developed these resorts and these recreational areas as a business in the community.

We think that establishing the ski resorts in Colorado is just as important to those communities as establishing a lumberyard in Wisconsin. It goes with the economic development. It would be a mistake to say to Jim Goldman, the manager of a cooperative in Colorado, for example, at Steamboat Springs that is involved in establishing a ski resort that he is not allowed to develop their natural resource; thereby forcing the kids to leave the community.

We are very strong on rural development, and we believe that it is important that REA be there to help in this very necessary effort.

Finally, he is urging that we discontinue the REA support for surveys of urban or suburban areas. He is proposing that there be a means test established in that regard, and we believe that this is simply unworkable. Under his proposal, 53 of our REA electric borrowers would be excluded.

We have looked at those very carefully, and we find that each of the 53 systems have densities below 10 consumers per mile. The rate disparity in this group is much above the investor-owned utilities in the areas they serve. While they have pockets that have more density in population, on the whole there is still a need for continued support. Eighty-two percent of the counties served by these 53 systems have below the national average per capita income.

To sum it up, Mr. Chairman, we are recommending that REA stay in business. We are recommending a floor next year of $622 million and a ceiling of $933 million for the insured loan program, and a guaranteed loan program of $813 million minimum and a maximum ceiling of $1,962 million.

In establishing appropriations for loan losses, we strongly recommend that the Congress give serious consideration to the loan defaults that have taken their toll on the REA and telephone revolving fund. According to the REA, in fiscal year 1986, the revolving fund suffered a loss of $172 million. In 1985, it was $170 million.

These losses are because of the economic crisis in rural places. The hard times out there will continue to have a negative impact on the rural electric and telephone cooperatives. Reduced loads in irrigation and agriculture have resulted in less than anticipated demand for power. This, in turn, has forced some of our cooperatives to default on their REA loans.

Mr. Chairman, in closing, I want to thank you and your colleagues for arranging for $2 billion in refinancing last year. It has been enormously helpful. We appreciate your cosponsoring the measure this year which will allow additional refinancing of some of the high-cost loans that our cooperatives were forced to obtain when they built these powerplants in the 1970's.

Now, Mr. Chairman, I would like to yield to my colleagues for a short statement.

Mr. Stork from Missouri.

Mr. STORK. Mr. Chairman, I would like to emphasize the statement that Mr. Bergland made about the positive economic impact that refinancing can have. I would like to relate the figures that we have in Missouri.

We have just completed our long-range financing forecast for the period of 1988 through 1997. The study is done annually based on the data available to us in terms of inflation, estimates of increases in fuel costs, and other factors for our 40 distribution systems in Missouri, and so did Iowa have an indication of projected costs and their gross sales of electric supply.

Since the cost of wholesale electric energy represents 75 to 80 percent of the cost in serving the ultimate consumer, associated costs have a major impact on the economy of the local areas. Most current studies show that the cost of wholesale electric energy will increase $11 million per year for the next 2 years. This increase is based on a very modest inflation rate of 3 percent.

We are greatly concerned about the impact of these increases on the already depressed economies of our rural areas and small rural communities. Associated Electric, in our state, had the ability to refinance $500 million of high cost debt, we could realize an $8 million reduction in interest cost at the current interest rate. This refinancing would have a very, very positive economic impact on our state. We ask that this be considered, and that REA be mandated to allow us to do this.

Thank you very much.

Mr. SHOWS. Mr. Chairman, I am Tom Shows, general manager of the Pearl River Valley Electric Power Association in Columbia, MS.

To the rural areas of Mississippi, as Senator Stennis' office knows, we are a part of a generating cooperative. Let me quickly state that we have $443 million in debt outstanding, if we could refinance that, it would mean a savings of approximately $40.49 cents per consumer per year to our consumers.

It is important to the rural people of Mississippi, and it is important to the rural people of our nation. We appreciate your support, and thank you for this opportunity.

Senator BURDICK. Senator Stennis regrets that he could not be here today because of another committee meeting, but he is very supportive of your efforts, and he is an especially good friend of Mr. Tom Shows.

I just have one or two questions here, Mr. Bergland. This morning, the telephone people testified on the REA program, and I want to ask you the same question that I asked them.

Private lenders make loans to rural electric co-ops. Is the Rural Electric Administration meeting the minimum levels set by Congress?

On the issue of prepayment of debt equity loans without penalty, how much of the outstanding $10 billion do you expect will be refinanced with a larger amount?

This is a three-part question. Did you hear all of it?

Mr. BERGLAND. I think so, Mr. Chairman. Let me try.

On the FFP debt, our survey shows that of the $20 billion or so that cooperative G&T's have borrowed from the Treasury Department through the FFP REA loan guarantee, about $10 billion of that has interest rates above 9 percent. In today's market, it could still be advantageous to them to refinance if they were given the power to do so. If the loan interest rates climb over the next months and years, there will no longer be an advantage.

We are convinced that if the $8 billion being recommended were approved that all of it would be taken out by co-ops that have high cost money, which they simply cannot pay, in some cases, without facing bankruptcy.

On the matter of the co-ops who borrow money privately, without REA support, I think that it is probably true. The ones that would suffer, of course, are the more remote, less densely populated areas, and even some of the more populated regions.

We have co-ops in Alaska, for example, serving native villages, where the people are terribly poor. They live in towns, but they have no income available to them. So while they meet the density numbers, I don't believe that there is a chance in the world that private banks would finance their requirements, and this is true with most of the system where we serve rural systems.

I am sure that there is some bank some place that would do the financing without an REA guarantee, but if we are going to maintain a national program, it has got to be national REA support to help us through the bad times as well as the good.

What was the third question, Mr. Chairman.

Senator BURDICK. The third question was: Has the Rural Electric Administration met the minimum loan levels set by Congress?

Mr. BERGLAND. Mr. Chairman, they did this last year. They exceeded the minimums in both the insured and guaranteed accounts. With this year's levels—we think that they will probably approve at least the minimum on the insured loan and the revolving fund financing requirement of the distribution systems.

We are not sure about the power supply side because the demand for credit to put up new powerplants is down substantially. It is not the fault of the administration, it is simply the consequence of circumstances. We are just not building new powerplants.

Senator BURDICK. Some time ago—2 years ago—the administration appeared before the Congress and suggested that we ought to end the program in 5 years. Commissioner Hunter appeared before the committee 2 weeks ago; he has now changed this to 3 years, with the idea of a 70-percent guarantee. What is your reaction to that?

Mr. BERGLAND. It will cost the consumers more money. There is no way that you can eliminate the federal support from these programs and have them financed by private lending interests without adding to the cost of running the cooperatives, and adding to the cost of the power building. There is no way around this.

We have to understand that if we are going to end the government's role, we are talking about a substantial increase in electric power cost to a hard-pressed rural world and farm economies and, in most cases, they simply could not pay the bill, so it would make a bad situation worse. We are resisting the administration's efforts in this regard.

Senator BURDICK. Has it been the practice of the REA in the past to provide the service at the least possible cost, and has it been more interested in piling up credit to use in the future?

In other words, they are using their best efforts to maintain low prices for consumers on these lines?

Mr. BERGLAND. Yes, Mr. Chairman, that has been the theory. The REA program started 50 years ago, in the 1930's, because President Roosevelt saw that as long as these 18 million rural families were beyond the reach of power companies, and left without electricity, these people would always be poor.

He tried to get the power companies to take on the job, but they simply could not. We saw the formation of the best of both worlds, a smart public law, called the REA, teamed up with local consumer-owned cooperatives, that has overcome the impossible. It has worked. The system works, and it works at no cost to the U.S. Treasury or the taxpayers. The revolving fund maintains the balance.

We have a study committee looking at the revolving fund to see if some changes need to be made to maintain the integrity of the program. If changes are required, we will come back and make them.

In the past couple of years, there have been powerplant failures that have been caused by, in some cases, the farm depression like in western Kansas, for example. In some cases, it is the oil depression like in certain parts of Texas. In some cases, it is because of the unexpectedly high cost of nuclear powerplants that we bought into, which turned out to be not as cheap as we hoped.

Senator BURDICK. Isn't it also a fact that it was not the intention to build up an equity——

Mr. BERGLAND. Mr. Chairman, the program was intended to be a public service to the communities that otherwise couldn't have electric power. It was not intended to be a profitmaking organization, but simply to generate enough income to cover its expenses.

Senator BURDICK. This is one of the reasons that the REA has difficulties with financial safety.

Mr. BERGLAND. Yes, Mr. Chairman, our G&T's, our generation and transmission systems, for example, have only about 3 percent equity, and this is clearly not bankable. There is one or two, maybe, where the circumstances are really very bright, but the overwhelming majority, if it wasn't for the REA, the cooperatives would never have been there. In the second place, they couldn't stay there.

There is nothing to default back on. We don't have deep pockets. We are not like the investor-owned utilities that have been around a long time, that make money, that have done a good job in the big cities. We find no fault or criticism. But we don't have deep pockets, Mr. Chairman, and the minute that we hit hard times, we are in big trouble.

Senator BURDICK. We thank you very much for your contribution.

Mr. BERGLAND. Thank you, Mr. Chairman.

[The statement and letter follow:]

STATEMENT OF BOB BERGLAND

It is my pleasure to appear before you today on behalf of the more than 25 million Americans in 46 states who rely on NRECA member systems to supply dependable and affordable electric energy for their homes, farms and businesses. The leadership of the nation's 1,000 consumer-owned rural electric systems appreciate the ongoing interest and support which our program has received from the members of this panel, along with a majority of your colleagues in the Senate as well as in the House.

Accompanying me today are two of the officers of NRECA's national Standing Committee on Legislation: the Chairman of the Standing Committee, Mr. Frank Stork who is General Manager of the Association of Missouri Electric Cooperatives in Jefferson City, and the Vice Chairman, Mr. W.T. (Tom) Shows who is General Manager of the Pearl River Valley Electric Power Association in Columbia, Mississippi.

Before I discuss NRECA's recommendations for REA lending levels, I would like to provide you and the members of this Committee with a brief report on the "State of the Program:"

> Rural electric systems continue to provide high quality and reliable electric service to more than 10% of the population of the Nation. Rural electric lines span some 75% of the Nation's land mass.
>
> Recent data show that rural electric systems continue to operate under the same disadvantages that have traditionally existed in this program. Rural electric systems now serve an average of 5.2 consumers per mile of line compared with 31 customers per mile for investor-owned electric systems, and 65 per mile for municipal systems.
>
> Revenue per mile of line for a rural electric co-op amounts to $5,400 annually, compared to the $45,000 collected by investor-owned utilities and $79,100 earned by the average municipal system. Conversely, co-ops have invested $1,500 in distribution plant for each consumer compared to $1,020 for each investor-owned utility customer, and $970 for each municipal customer.
>
> Today, more than 70% of all rural electric systems have higher rates than their neighboring utilities. This disparity can be traced to several factors:
>
> -- The inherent disadvantages of serving sparsely settled areas;
>
> -- The fact that rural electrics serve relatively few commercial and industrial loads compared to other utilities. During 1985 only about 1/3 of rural electric sales went to commercial and industrial consumers, compared to 2/3 in the case of investor-owned and municipal utilities. The relative absence of commercial load on co-op lines decreases load factor and increases costs to all rural electric consumers, and
>
> -- The fact that nearly 70% of the generation capacity of rural electric systems has been placed into operation during the past ten years -- a period of inflated construction costs and high interest rates.
>
> Rural electric systems serve areas that have been hard hard hit by the economic crisis that has plagued much of our agricultural and rural economies. These economic difficulties have drastically reduced load growth for many rural electric systems. In fact, today 222 of the nation's 930 rural electric distribution systems are losing consumers. This factor combined with the high cost of constructing new generation plant have resulted in defaults by six generation and transmission (G&T) cooperatives. We are hopeful, however, that these problem cases will be resolved in a constructive and expeditious manner through mutually beneficial agreements between REA and the G&Ts.

The problems facing many of our systems have spurred new initiatives to provide greater assistance to rural consumers. Recently, NRECA held a series of four field hearings across the country which were attended by 500 rural electric directors and managers. The predominant sentiment expressed at all the hearings was that REA and the rural electric systems must become more involved in community and economic development. We must become activists and catalysts for development. The future of rural America is at stake.

The matter of expanding REA's role into rural economic development is one that will be the focus of intense study by NRECA. We will be back before this panel in the future to discuss this vitally important issue. In the meantime, let me touch on a few of the national efforts which NRECA has spearheaded this past year, efforts which have led rural electric cooperatives to:

> Sponsor local "health fairs" designated to screen large numbers of rural Americans for early signs of disease or disability and provide them with information on how to live healthier lives;
>
> Join the NRECA sponsored National Rural Telecommunications Cooperative (NRTC), a group that will direct the development of satellite-based telecommunications services for consumer, education and rural utilities business applications;
>
> Focus new initiative on economic development programs in rural areas. For instance, hundreds of co-ops are making use of a "How To" manual on economic development, compiled and disseminated by the NRECA staff. The manual is designed to provide community leaders with information on matters such as promoting job creation from existing local business and industry, attracting new employers to the community, improving a community's potential as a location for economic investment, and preparing an economic development plan.

These are but a few of the programs rural electric co-ops are undertaking on a nationwide basis. It does not take into account the numerous other ways in which rural electric co-op systems -- through their own initiative -- are assisting their consumers, and the vital role that rural electric co-ops across the country perform in their communities.

Mr. Chairman, REA is critical to these continued efforts. REA is and should continue to be the solid foundation, the rock upon which rural electrification is built. We appreciate the fact that the Committee shares that view. We also appreciate the Committee's continuing strong support for the concept of a Rural Electrification Administration that is relentlessly aggressive in seeking solutions to the very serious problems facing our Nation's rural areas, and by extension, our Nation's rural electric cooperatives. That is not the agenda of this Administrator nor, unfortunately, of this Administration.

The Administration's budget proposals for fiscal 1988 represent yet another attempt to phase out the rural electrification program through a series of economically crippling actions which the REA Administrator calls "major new initiatives." These "major new initiatives" and so-called "reforms," fool no one -- they are, in essence, land mines set to blow up the program.

Let me address some of the Administrator's claims in greater detail:

In his testimony before this panel, the REA Administrator stated that REA funding is used to "serve areas never intended when Congress established REA." He describes these areas as being "heavily populated, prosperous, urban and suburban," and "recreational."

These questionable premises belie the facts, which are that:

> (1) Implicit in Mr. Hunter's attack is the charge that the fundamental nature of the rural electric program has changed. This is not true. As I stated earlier in my testimony, rural electric systems serve about 10% of the U.S. population and 75% of the land mass. Rural electrics average 5.2 consumers and $5,400 per mile of line compared to 31 consumers and $45,000 per miles for investor-owned utilities, and 65 consumers and $79,100 per mile for municipal utilities.
>
> (2) Rural electrification is a national program. Its effectiveness is directly related to the fact that the Congress has never chosen to handicap it with a "means" test which would exclude some cooperatives and include others.

This national unity has resulted in uniformity in accounting and engineering standards, plant design and specifications, and equipment among rural electric systems from one end of this Nation to the other. If this unity were fragmented by a sensible sounding means test proposal, every rural electric system -- small and large, east and west -- would suffer.

Rural electric systems are well aware of the "divide and conquer" tactics being proposed by Mr. Hunter. The same tactics were attempted by David Stockman who, in 1981, sought to pit one agricultural sector against another in an effort to defeat them all. These old tactics will never work in the rural electric program.

(3) The rural electrification program is based upon providing service at standard rates to everyone in a co-op's service area. This is the basic principle underlying the "area coverage" concept which is the basis of rural electrification.

Cooperatives serve all comers -- rich or poor, black or white. That's our role. It comes with the territory. We are well-rooted in the area coverage concept. We will never "skim the cream" -- that is, serve only lucrative loads and abandon the unprofitable ones. However, we also object vigorously to those who suggest that if a cooperative is fortunate enough to serve a favorable load, it should be penalized by being denied REA funding. That's unfair.

The more easily-served utility loads help to offset the higher costs of serving the more sparsely populated areas. An REA borrower can and must continue to be able to serve all consumers in its area regardless of subsequent increases in population, and without being excluded from REA.

(4) As a matter of policy, the federal government has decided to provide assistance to all segments of the electric utility industry -- cooperatives, publicly-owned utilities and investor-owned utilities. All three segments are provided assistance in different forms: investor-owned utilities through favorable tax treatment; publicly owned utilities through tax-exempt bonding authority, and rural electric systems through REA's lending programs.

Some have argued persuasively that the assistance enjoyed by investor-owned and municipal systems exceeds that provided to rural electric systems. But we are not here today to argue that matter. The point here is that these other utilities are provided federal assistance without any means test. A wealthy municipal or investor-owned system serving a densely settled area is accorded the same assistance as one serving an economically distressed or low density area. If this is the case for investor-owned and municipal utilities, why should co-ops be subjected to means tests? To do so would be unfair and inconsistent.

Contrary to what this Administration and the REA Administrator claims, the original goal of the REA statute has not been completed. Continued service is in accordance with the RE Act and is a legitimate and necessary part of the rural electric cooperative systems' operations.

We take umbrage to the Administrator's continuing references to the categorizing of "recreational" areas and "resorts" served by rural electric cooperatives.

Although rural electric systems serve far fewer commercial and industrial loads than other utilities, these loads are very important to co-ops since they increase load factor and thereby help all consumers.

The types of industries and businesses that exist in rural America run the gamut. Among these valid businesses is tourism. If a rural community has made a realistic and patient assessment of its potential for growth and has determined that it can take advantage of its mountain slopes or ocean shorelines to develop a recreational area for tourists, would it be prudent not to develop these natural assets to rebuild a community's economy?

I invite the REA Administrator to debate this question with the mayor or citizens of any town that relies on tourism for its revenue base. I invite the REA Administrator to debate this question with Jim Golden, Manager of Yampa Valley Electric Association, a cooperative in Steamboat Springs, Colorado which serves some ski loads.

What Jim Golden would tell the Administrator is that he would prefer to have a ski area within his co-op's service territory than to have the town's brightest kids leave because they can't find decent jobs. He would say also that he would prefer to have a viable tourist business in the area than to watch the few remaining retail shops on Main Street shut down and the local rural post office and schools being forced to close. To Jim Golden and to the other citizens of Steamboat Springs, tourism is as good an industry as a lumber mill or a sewing factory and no one can debate that.

And as I mentioned earlier, our cooperatives' historic and ongoing involvement in rural development and revitalization have contributed largely to these efforts. We have every intention of continuing these efforts for the future.

The Administration has proposed discontinuing REA assistance to borrowers serving "urban/suburban" and "recreational" areas. In his testimony, the REA Administrator has assured the Committee that private lenders will find these co-ops to be "viable borrowers."

It is our contention that a private lender would not find any of these co-ops to be "viable borrowers" if they were stripped of all their favorable loads including commercial and industrial consumers, recreational enterprises and the more densely settled residential areas. Without these loads, the ability of the co-op to repay its loan would be threatened.

The REA Administrator is proposing that 53 REA electric borrowers be excluded from eligibility for REA fund. Mr. Hunter's statement says that, "Under proposed Administration legislation, any electric distribution borrower or telephone borrower serving more than 20,000 customers and with more than 50 percent of these customers residing within an MSA or CMSA of greater than 100,000 population would be defined as an urban/suburban borrower. Such borrowers would be ineligible for any further REA direct loans, Rural Telephone Bank loans or REA loan guarantees."

A brief analysis of the criteria proposed by Mr. Hunter reveals that it is extremely flawed. Our analysis of these 53 systems shows that:

*** All have substantially lower density than the average of 65 customers per mile for municipal electric utilities, and all but one -- a co-op in Alaska with a density of 35 -- have substantially lower density than the average of 31 customers per mile for investor-owned utilities. In fact, 30 of the 53 rural electric systems have densities below 10 per mile.

*** All except for 8 of the 53 systems have higher electric rates than their neighboring utility. The rate disparity among this group of 53 is as much as 46.1%.

*** These 53 systems which would be denied future REA loans serve a total of 372 counties -- 82% of these counties have lower per capita incomes than the national average.

SPECIFIC PROPOSALS FOR FY 1988

According to the results of the NRECA Annual Loan Fund Survey, we have determined that the demand for REA funding will increase slightly in Fiscal 1988. Inasmuch as the ranges in effect for Fiscal 1987 will provide adequate funding for rural electric systems, we recommend the identical levels for the coming year.

Specifically:

** We recommend a floor of $622 million and a ceiling for $933 million for insured loans, and a floor of $813 million and a ceiling of $1,962 million for loan guarantees in the year beginning October 1, 1987.

** In establishing appropriations for loan losses, we strongly recommend that the Congress give serious consideration to the loan defaults that have taken their toll on the Rural Electrification and Telephone Revolving Fund. According to REA, in FY 1986 the Revolving Fund suffered a loss of $172,306,000; in FY 1985, the losses amounted to $170,216,000.

The economic crisis in rural America has and will continue to have a negative impact on electric co-ops systems. Reduced loads in irrigation and agriculture have resulted in less than anticipated demand for power. This, in turn, has resulted in defaults by some of our systems. However, NRECA and its member systems are committed toward maintaining the Revolving Fund as a complete and viable entity ~~and~~ we encourage the members of this Committee and the Congress to keep it so.

Additionally, we commend this Committee and the Congress for its past support for the Revolving Fund and for its efforts and success at maintaining the loan ratios that are currently in force, and for continuing to prevent REA from using a general funds policy to deny loan funds to eligible borrowers.

Furthermore:

** We recommend that the Congress reject the Administration's proposal to increase the interest rate on REA insured loans, or to assess REA borrowers with a "loan origination" or other fees."

** We recommend that Congress reject the Administration's proposal to replace the existing insured loan program and the guaranteed loan program with a program that relies totally on private capital with only a 70% REA guarantee. A 30% risk is higher than what most private lenders will bear and will either render many co-op systems ineligible for financing through the private money markets or drastically increase costs to rural electric systems and their consumers.

Finally, we express our opposition to the Administration's proposal to rescind loan authorizations which Congress has already approved: for the current fiscal year, $185 million from the REA insured loan floor; $20 million to reimburse the Rural Electrification and Telephone Revolving Fund, and $441 million from the REA guaranteed loan floor.

Before closing, Mr. Chairman, I would like to say that we are grateful to this Committee for having paved the way in enabling our systems to refinance, without penalty, $2 billion in high-cost debt while retaining the REA guarantee. Accompanying my testimony today is a full report on the rural electric co-op systems' prepayment efforts. We hope that Congress will approve legislation this year that will require REA to permit all rural electric systems who wish to refinance their high-cost debt to do so as well.

Thank you again, Mr. Chairman, for this opportunity to present our views to the Committee. I will be delighted to respond to any questions you may have now or at any time in the future.

LETTER FROM BOB BERGLAND

Honorable Quentin N. Burdick
United States Senate
Washington, D.C. 20510

April 6, 1987

Dear Senator Burdick:

I am writing to thank you for your help in obtaining passage of legislation in 1986 concerning prepayment of REA guaranteed loans and to report to you on the manner in which this legislation is being implemented.

The Reconciliation Act, which was passed with your strong support last October, authorizes the Administration to permit Rural Electrification Administration (REA) borrowers to prepay Federal Financing Bank (FFB) loans guaranteed by REA. This Act also (a) provides that these FFB loans will be prepaid at 100 cents on the dollar, using private capital with an REA guarantee and (b) requires REA to approve no less than $2.0175 billion in such prepayments during fiscal year 1987.

Two REA borrowers have received approval to date to prepay FFB debt.

*On March 19, 1987, Soyland Power Cooperative of Decatur, Illinois prepaid $282 million of FFB loans carrying high interest rates. This prepayment will permit Soyland to reduce its interest costs by more than $8 million per year, thus offering rate stability and major savings to rural Illinois consumers -- many of whom are suffering from severe financial problems tied to the farm economy.

*On March 23, 1987, Cajun Electric Power Cooperative of Baton Rouge, Louisiana was given permission to prepay $1.079 billion of its high interest rate FFB loans. Cajun's refinancing will save its consumers more than $25 million per year -- $70,000 per day. This relief will greatly benefit Cajun's consumers who today pay much higher rates than those offered by urban utilities in the State. These cost savings come at a particularly opportune time in view of the continued "financial fallout" which Cajun's consumers are facing because of the collapse of much of the State's energy-related economy.

Mr. Chairman, I am sorry to say that, at this time, I cannot report that all REA borrowers are being permitted to prepay their FFB loans. In issuing final rules to implement the prepayment provisions of the legislation, REA prohibited most borrowers from receiving any benefit. REA's final rule, issued on January 14, 1987, provides that the $2.0175 billion "floor" established by Congress for FFB prepayments will be interpreted as a "ceiling." This will limit eligibility for prepayment to only 20% of the FFB loans -- $2.0175 billion out of $10 billion -- which REA borrowers have at long-term rates ranging from 8.5% to greater than 15%. Under REA's interpretation of the Reconciliation Act few borrowers in addition to Soyland and Cajun will be permitted any relief from the high interest debt they are carrying. This REA rule restricting prepayments will:

- o Perpetuate an inequity in which rural electric systems are, alone in the electric utility industry, unable to refinance high interest rate debt. This inequity is particularly severe in view of the fact that more than 70% of all rural electric systems have higher rates than their neighboring investor-owned utilities which during 1986 refinanced $10.9 billion of high interest debt. Furthermore, refinancing is widely accepted in our economy and has occurred at an unprecedented pace in all sectors -- from homeowners to large industry.
- o Deny rural consumers substantial and needed savings from replacing high interest rate FFB loans -- prepaid at 100 cents on the dollar -- with lower interest rate private capital.

Each rural electric system with an FFB loan outstanding has received a letter from REA indicating the likelihood of REA approving a request from the borrower for prepayment. Despite the fact that most of these letters have not been very optimistic concerning the likelihood for approval, most of the 55 rural electric systems with FFB loans have submitted prepayment requests to REA. Our analysis shows that these rural electric systems have $8 billion in FFB loans -- in addition to the $2 billion in refinancing mandated by the 1986 legislation -- which if refinanced at today's private market rates would result in major savings to rural consumers.

Rural areas have not fared well during the 1980s, despite the fact that other areas of our nation have prospered. NRECA believes that rural consumers should be permitted to share in the benefits of today's reduced interest rates. These are the people who are bearing the brunt of the agriculture depression in areas where many rural businesses have folded. Permitting all REA borrowers to prepay FFB debt is a fair policy that should be mandated by the Congress.

We sincerely appreciate your leadership in the legislative efforts to permit REA borrowers to prepay FFB debt. Without your support, prepayment of FFB debt by rural electric systems -- and the corresponding savings to consumers -- would not be possible. We will keep you advised of further developments concerning this matter, which is of vital importance to NRECA and its member rural electric systems.

Sincerely,

Bob Bergland

Bob Bergland
Executive Vice President

CONGRESSIONAL WITNESS

STATEMENT OF HON. STROM THURMOND, U.S. SENATOR FROM SOUTH CAROLINA

Senator BURDICK. Our next witness is the Honorable Strom Thurmond, U.S. Senator from the state of South Carolina, and Dr. L.L. Bauer, professor of agricultural economics, Clemson University; and Dr. O.J. Dickerson, head of the Department of Plant Pathology and Physiology, College of Agricultural Sciences, Clemson University.

Senator THURMOND. Thank you very much, Mr. Chairman.

Mr. Chairman, I would like to thank you and the other members of the Senate Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies for the opportunity to testify here today.

Mr. Chairman, I intend to speak briefly on several issues, and then introduce the two gentlemen from South Carolina who will be testifying today. I ask that my full statement be inserted in the record, and I shall briefly highlight it.

Senator BURDICK. Without objection, so ordered.

Senator THURMOND. Mr. Chairman, American industry capitalizes on its ability to maintain a technological advantage. The same is true for American agriculture. The agricultural industry in the United States utilizes the latest in technological innovation, enabling our farmers and agri-businesses to maintain an advantage over our competitors. It is vital that we continue to maintain an advantage in this area, especially since our agricultural industry has been suffering from the effects of a high dollar and increased protectionism and competition from our agricultural trading partners.

Our technological advantage stems from our research and agricultural infrastructure. The Agricultural Experiment Station System in our country provides vital services in research and development. Unlike large corporations, single farmers cannot form groups to conduct the basic research that leads to technological development. Agricultural experiment stations fill this void and help our farmers to help themselves.

Other important agencies funded by the federal government include the Soil Conservation Service. The SCS assists our farmers in refining their practices. They have turned conservation into a science. Now farmers classify their land by erodibililty, and with the assistance of the SCS, farmers put together specific plans with the intent of saving soil and water resources.

Mr. Chairman, over the past several years, Laurens County in South Carolina has suffered from excessive flooding. The river has passed the 100-year flood level twice during the past 15 years. Due to this flooding, businesses have been forced to vacate the area, causing great hardship to the local community.

This conservation district has developed a storm water management plan that will protect businesses, control sedimentation, and improve water quality in this area. The estimated cost to complete this project is approximately $2.9 million.

I have requested that Mr. R.T. Harris, president of the South Carolina Association of Conservation Districts, contact the committee with additional information about this project.

Because of the threat of imminent flooding in this area, I urge the committee to instruct the national office of the Soil Conservation Service to providing funding for this program as soon as possible.

Mr. Chairman, the Rural Electrification Administration is also another extremely important part of the infrastructure of rural America. With the help of this agency, we have provided the necessary energy and communications network that facilitate a strong agricultural economy.

Mr. Chairman, a dramatic reduction in funding for any of these important programs would cause great hardship to people in rural America.

Again, Mr. Chairman, I urge the members of this subcommittee to do all they can in the upcoming fiscal year 1988 appropriations process to ensure these vitally important programs are not disproportionately reduced or eliminated.

Mr. Chairman, I would like now to introduce two gentlemen from South Carolina, who will also address two research programs at Clemson University: Dr. Larry L. Bauer, and Dr. Ottie J. Dickerson.

Dr. Bauer is a professor of agricultural economics in the Department of Agriculture and Economics and Rural Sociology at Clemson University. He is the principal investigator with the Agricultural Adjustment Through Alternative Cropping Systems Project.

Dr. Dickerson is the head of the Department of Plant Pathology and Physiology at Clemson University. He is the coordinator of the Peach Tree Short-Life Research Program.

Under the direction of these two fine gentlemen, Clemson has been conducting research to improve the economic situation of our farmers, with particular attention being given to solving agricultural problems in the Southeast region of our nation.

Mr. Chairman, we are fortunate to have these gentlemen address the committee today, and I am confident that their testimony will be beneficial to you and the other committee members in your efforts to prepare the fiscal year 1988 Agriculture, Rural Development and Related Agencies appropriations bill.

We thank you very much.

[The statement follows:]

STATEMENT OF SENATOR THURMOND

I would like to thank you and the other members of the Senate Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies for the opportunity to testify here today.

American industry capitalizes on its ability to maintain a technological advantage. The same is true for American agriculture. The agricultural industry in the United States utilizes the latest in technological innovation, enabling our farmers and agri-businesses to maintain an advantage over our competitors. It is vital that we continue to maintain an advantage in this area, especially since our agricultural industry has been suffering from the effects of a high dollar and increased protectionism and competition from our agricultural trading partners.

Our technological advantage stems our research and agricultural infrastructure. In my home State, the South Carolina Agricultural Experiment Stations of Clemson University have conducted many fine research programs to improve the economic condition of farmers and aid in providing reasonably priced, quality food and fiber commodities to the public. I am particularly interested in a number of very important research programs and wish to emphasize the need for their continued funding.

Mr. Chairman, the first of these high-priority programs is the Agricultural Adjustment in the Southeast through Alternative Cropping Systems Program, being conducted jointly by Clemson University, the University of Georgia, and North Carolina State University.

ALTERNATIVE CROPPING SYSTEMS

For the past three years, these three Universities have been conducting a innovative research program to improve farmers' marketing and growing practices. Again, American agriculture is capitalizing on technology. Here, the technology is the science of marketing. This program is aimed at increasing and stabilizing farm income in the Southeast through development of alternative crops suitable to that region of the Country. The Agricultural Economics and Horticulture Departments work together to define market "windows" for certain crops and maximize the farmers' price while providing local markets with needed commodities.

I support continued funding for this important program. Research in this area will help farmers adjust to their changing marketplace.

PEACH TREE SHORT-LIFE RESEARCH

The Peach Tree Short-Life Research Program is another example of our use of science to improve the application of agriculture. This program investigates the causes of "Peach Tree Short-life", or rather, the premature death of young peach trees. The damage results primarily from root system damage inflicted by various nematodes. Prior to 1979, farmers were able to successfully limit nematode populations with the use of the soil fumigant DBCP. However, DBCP use has been banned since 1979, and no effective replacement is available. It was for these reasons, together with the importance of the peach industry to the Southeast, that Congress first funded research in 1981 to combat the peach tree short-life problem.

This research has been successful in further identifying the causes of peach tree short life. In addition, a variety of economically viable horticultural practices have been identified which lessen the incidence of premature death in nematode-infested peach trees. However, much remains to be done, and it cannot be done without continued funding.

HATCH AND MCINTIRE-STENNIS FUNDS

The State Agricultural Experiment Station Systems provide an infrastructure for research and development in agriculture in our Nation. Unlike large corporations, individual farmers cannot easily form groups to conduct the basic research that leads to technological development. Agricultural Experiment Stations fill this void and help our farmers learn to help themselves.

Dr. A.W. Snell, Acting Director of the South Carolina Agricultural Experiment Station, has contacted me regarding the importance of the programs that fund Agricultural Experiment Stations. Mr. Chairman, I ask that his letter be included in the record following my testimony.

PEST CONTROL AND ERADICATION

The United States Department of Agriculture, in conjunction with State programs, conducts programs for the control and eradication of agricultural pests. These pests can cause millions of dollars in damage. The goals of the Witchweed Eradication and Boll Weevil Eradication are to eliminate these parasites. Other pests, such as fireants, can only be controlled, not eliminated. I urge the Committee to consider the importance of these programs to our farmers.

Mr. Chairman, Mr. H.B. Jackson, Acting Director of the S.C. Crop Pest Commission, and the members of the Clemson University Cotton Commodity Committee have contacted me regarding the necessity for funding for the Witchweed and Boll Weevil programs. I ask that this correspondence be inserted in the record following my remarks.

CONSERVATION

Farming requires the judicious use of our finite resources - soil and water. During the 1930's, we learned to practice farming wisely, utilizing tillage techniques and irrigation to overcome the disastrous effects of the dust bowl. We have refined these practices over the years into a science. Now farmers classify lands by erodibility and formulate specific plans to conserve soil and water resources.

Government is closely involved with these efforts, especially through the work of the Soil Conservation Service (SCS). The SCS works with farmers in the States to improve our natural resources, through work with individual farmers and also projects to improve our natural resources.

Mr. Chairman, over the past several years, Laurens County in South Carolina has suffered from excessive flooding. The river has passed the 100 flood level twice during the past fifteen years. Due to this flooding, businesses have been forced to vacate the area, causing great hardship to the local community. This conservation district has developed a storm water management plan that will protect businesses, control sedimentation, and improve water quality in this area.

Mr. R.T. Harris, President of the South Carolina Association of Conservation Districts, has contacted me recently in this regard. I ask that his letter be inserted in the record following my remarks.

I have requested that Mr. Harris contact the Committee with additional information about this project. The estimated cost for this project is $2.9 million. Because of the threat of imminent flooding in this area, I urge the Committee to instruct the national office of the Soil Conservation Service to provide funding for this program as soon as possible.

Mr. Chairman, in my judgment, we simply cannot afford to eliminate or drastically reduce funding for the Soil Conservation Service which provides technical services to farmers and coordinates conservation efforts with state and local governments.

Our soil and water resources are crucial to our survival and must be wisely managed.

RURAL ELECTRIFICATION ADMINISTRATION

Mr. Chairman, I would also like to take this opportunity to encourage members of this Subcommittee to support continuance of the Rural Electrification Administration direct loan, and loan guarantee programs. These programs have been of tremendous assistance to rural communities all across our Nation.

Termination of these important programs would result in increased rates for electric and telephone services and thereby lessen the quality of life in rural America. The impact would be greatest upon the farmer, who is already suffering great economic hardships.

Again, Mr. Chairman, I urge that the members of this Subcommittee do all they can in the upcoming fiscal year 1988 appropriations process to ensure these vitally important programs are not disproportionately reduced or eliminated.

INTRODUCTION OF S.C. WITNESSES

Mr. Chairman, I now would like to introduce two gentlemen from South Carolina who will also address the two research programs at Clemson University: Dr. Larry L. Bauer and Dr. Ottie J. Dickerson.

Dr. Bauer is a professor of agricultural economics in the Department of Agricultural Economics and Rural Sociology at Clemson University. He is the principle investigator with the Agricultural Adjustment through Alternative Cropping Systems Project.

Dr. Dickerson is the head of the Department of Plant Pathology and Physiology at Clemson University. He is the coordinator of the Peach Tree Short-Life Research Program.

Under the direction of these two fine gentlemen, Clemson has been conducting research to improve the economic situation of our farmers, with particular attention being given to solving agricultural problems in the Southeast.

Mr. Chairman, I appreciate your allowing these gentlemen to address the Committee today, and I am confident their testimony will be beneficial to you and the other Committee members in your efforts to prepare the Fiscal Year 1988 Agriculture, Rural Development and Related Agencies Appropriations Bill.

LETTER FROM R. THEO HARRIS, PRESIDENT, SOUTH CAROLINA ASSOCIATION OF CONSERVATION DISTRICTS

May 8, 1987

The Honorable Quentin Burdick
Chairman
Senate Appropriations Subcommittee
  on Agriculture, Rural Development,
  and Related Agencies
United States Senate
Washington, D. C. 20510

Dear Senator Burdick:

As a follow up of Senator Thurmond's remarks to your committee on April 7, 1987, I submit the enclosed information regarding stormwater management funding for Laurens County, South Carolina.

The work needed to complete the project will involve four (4) floodwater retarding dams and 1.1 miles of channel work. The funds needed to complete the project are $2,900,000. The estimated effects and benefits include:

1. Reduced flooding in a local river and creek directly impacting local businesses and over thirty homes in the flood plain.

2. The elimination of 98% of the average annual flood losses.

3. Providing protection to lands upstream from the Laurens area and also providing fishing and recreational uses.

4. Benefits exceeding costs.

5. No significant adverse environmental impacts expected.

In order to expedite the project, which is ready to be started and only needs funding, I am requesting that this appropriation be provided to the United States Department of Agriculture - Soil Conservation Service budget as a one time, line item for South Carolina.

Your consideration of this matter is greatly appreciated by me and every citizen of Laurens County and South Carolina. If I can provide any additional information, do not hesitate to contact me.

Sincerely,

R. Theo Harris

R. Theo Harris
PRESIDENT
South Carolina Association
of Conservation Districts

CLEMSON UNIVERSITY

STATEMENT OF DR. L.L. BAUER, PROFESSOR OF AGRICULTURAL ECONOMICS

Dr. BAUER. Mr. Chairman, I am L.L. Bauer. We appreciate Senator Thurmond's introduction.

Mr. Chairman, we appreciate this opportunity to appear here on behalf of these projects. Let me read a brief summary of the testimony that we submitted previously for inclusion in the record.

This project was initially funded in 1984. We are here to support funding for a fourth year in fiscal year 1988.

Resources in land-grant universities are being allocated to address the critical economic problems faced by farmers. However, our resources are inadequate, and we seek more support to augment our efforts to provide the information required for farmers to make necessary adjustments.

It would appear that the Southeast would have a comparative advantage in the production of selected vegetable crops. Climatic conditions are amenable to multiple cropping systems, and the Southeast is relatively close to population centers. The resource availability is far greater. The basic questions are how favorable can the Southeast be in production, and which crops are most competitive.

The land-grant universities in Georgia, North Carolina, and South Carolina have joined in a research and education effort on economic and biological potentials for producing and marketing certain vegetables. The objectives of the project are:

Identify commodities which have the most potential and determine the feasibility of competitive production; evaluate markets for expanded production; and develop and disseminate information.

The project is truly regional in that six academic departments and three universities are engaged in a cooperative and closely coordinated interdisciplinary research effort.

Previous research has identified several crops with potential. Specific production problems have been identified for study. An example is research on heat tolerant varieties of broccoli. Possible markets have been investigated. Preliminary estimates have been made of the increased volumes on prices.

A survey of first handlers is being completed to determine their potential to handle the increased production. A survey of grocery store chains is being conducted to investigate the requirements necessary for producers to access this potential market.

Information on international markets is being collected. Preliminary reports indicate great potential for increased exports to Asia and to the Common Market. A microcomputer model to assist farmers in developing cost and return estimates is being developed. This information will lead to another computer program to provide a tool to determine those crops that should be grown and maximized.

Another model is being developed to discern the competitiveness of traditional row crops. This research is oriented toward providing farmers and agri-businesses timely information on production and marketing opportunities. The potential gains to farmers are great, as they are to transportation, processing, and agricultural supply sectors.

Efforts have been made to assimilate the information as quickly as possible. There have been numerous presentations to farmers, along with media coverage. The research is also transferable to other states.

The next phase of the project will be involved with the implementation results. Possible strategies include working directly with potential buyers of specific products for particular use.

The transfer of production information will be accomplished by typical methods as well as through more direct involvement, perhaps assistance to groups of producers in the establishment of cooperative pack houses and in the marketing of their production.

Management practices for particular crops are being investigated. Analyses will be conducted to estimate impacts of income risk to farmers. Further marketing analysis is of crucial importance. Economies of size for producers, pack houses, and marketing firms needs to be studied.

The research has been successful up to now in meeting objectives, but is now at a critical point. Research results need to be refined and the important implementation process accomplished. For these reasons, the budget request for fiscal year 1988 is $450,000.

The opportunity to appear before you is appreciated as is your support for this project. We feel that the Tri-State Vegetable Project is of vital importance to the farmers of the Southeast.

Thank you.

Senator THURMOND. Mr. Chairman, I have another engagement, if you would excuse me.

I would like to thank these gentlemen for the work that they have done.

STATEMENT OF DR. O.J. DICKERSON, HEAD, DEPARTMENT OF PLANT PATHOLOGY AND PHYSIOLOGY

Dr. DICKERSON. Mr. Chairman, I am Joe Dickerson. I will be testifying to request for continued support through a special grant for peach tree short-life research in the Southeast to be centered at Clemson University. This project has been funded previously through special grants. I very much appreciate the opportunity to do this. Like my colleague, I will shorten my submitted testimony.

A disease syndrome responsible for premature death of peach trees in the Southeastern United States, and other peach growing areas, is characterized by sudden collapse in the springtime of otherwise apparently healthy trees, usually just before, during, or just after bloom. Because the contributing factors to early tree mortality are numerous and their interactions complex, a somewhat amorphous term, "peach tree short life," has been used to describe this disease.

Peach tree short life adds a significant, chronic burden to cost of peach production. More than 100,000 trees die in the region each year, often before costs of orchard establishment are recovered. Financial losses annually from tree death exceed $7 million, and additional undetermined losses accrue from reduced growth of young trees, lower yields of fruit during the first 4 to 5 years of production and costs of nematicide treatments. More than two-thirds of the peach acreage in the three-state region potentially suffers from the peach tree short life syndrome.

In the absence of short-term measures to control nematodes, especially the ring nematode, longer-term objectives have become increasingly focused upon measures to reduce dependence upon chemical nematicides. Nematode resistance is very attractive because it is inexpensive to implement, and is easily adopted by farmers. Its major disadvantages are the long-term commitment that is necessary to develop and bring to commercial use resistant rootstocks and the large capital investment that is required.

Research completed thus far indicates that resistance is a feasible objective within 10 to 12 years. Ground cover research also has attractive features because the objectives coincide with erosion control practices. Biological control through the use of microbial parasites is a third alternative, but the use of such agents for effective and reliable control appears to be many years in the future.

Therefore, the main objective of the research for which support is solicited is to expand current efforts to screen germplasm of peaches and related species for resistance to the ring nematode.

Two other objectives will be pursued concurrently. One will be to expand current research to improve peach orchard cover crops to reduce nematode populations and control soil erosion. This will be done by field testing nonhost plants to examine their potentially beneficial influence on suppressing the nematode population. We will study the mechanism of nematode suppression by certain nonhosts to determine whether biologically suppressive natural substances can be utilized in control.

We hope that this brief and oversimplified summary of the peach tree short-life situation conveys that there is an important problem to be dealt with. Much progress has been made. We believe we are on a good track and that good results can be obtained.

Thank you very much for the opportunity to speak with you. I will be pleased to try to answer any questions.

Senator BURDICK. Thank you very much, gentlemen.

[The statements follow:]

STATEMENT OF LARRY L. BAUER

TESTIMONY
ALTERNATIVE CROPPING SYSTEMS

The opportunity to present testimony on behalf of the Tri-State Vegetable project is appreciated. Those of us involved with this work feel it is important to agricultural adjustment in the Southeast.

The project is entitled, "Agricultural Adjustment in the Southeast through Alternative Cropping Systems." It was initially funded during FY 1984 and we are asking your support for a fourth year in FY 1988. We are requesting funding in the amount of $450,000 under a USDA special grant. The funds will be used to augment research underway in three Southeastern Land Grant Universities (Clemson, N.C. State, and Georgia) to seek solutions that will aid Southeastern farmers in their efforts to adjust to changing economic conditions and a changing agricultural policy environment.

Economic conditions have been unfavorable for farmers and there is no apparent relief in sight. Farmers are searching for ways to survive in a changing environment. We in the Land Grant Universities have a basic responsibility to assist farmers through this difficult period, and to help preserve the basis of our food and fiber system. Resources are being reallocated in universities to address these critical problems. This is, after all, the charge to the Land Grant system. However, our resources are insufficient and we seek your support in our efforts to seek alternatives and provide information and analysis required for farmers to make wise and prudent decisions. In the absence of sound analysis and information, incorrect and costly decisions could exacerbate the current financial crisis and lead to further trauma in the agricultural sector.

The financial crisis in agriculture is unparalleled since the Great Depression. High production costs, declining commodity prices, weak demand, high debt loads, and growing commodity stocks have resulted in serious cash flow problems for farmers. The situation remains serious with a large number of farm bankruptcies. A large proportion of farms, particularly medium sized family farms, have debt repayment problems. Agricultural credit institutions are also experiencing financial losses and are threatened by the current problems.

The situation in the Southeast is no better than that of the rest of the U.S. In fact, it may be worse because of lower yields and higher production costs. Major field crop enterprises have not yielded large profits for even the above average farmers during the 1980's, and farmers with average yields have not broken even.

Continued survival of agriculture in the Southeast, characterized by a large number of relatively small farms, is dependent upon the extent to which the industry can adjust to changing policy and economic conditions. Economic risk could possibly be reduced by shifting dependence from traditional crops to systems that include new crops with viable markets. It appears that the Southeast might have a comparative advantage in the production of selected vegetable crops. The high level of management necessary for tobacco, for example, could be used for the production of vegetables. The climatic conditions are amenable to multiple cropping systems, and the Southeast is relatively close to population centers. Labor is often underemployed on farms in the Southeast.

Southeastern farmers have invested in irrigation systems in an effort to become more competitive in the production of crops such as corn and soybeans. Even with this technology, it remains difficult to compete with the Midwest in the production of such crops. Many are finding it difficult to cover the costs of center pivot irrigation systems and are searching for high value enterprises that can be multiple cropped with traditional crops.

In summary, the availability and quality of resources in the Southeast; land, labor, capital, and management; all favor an increase in vegetable production. The nutritional consciousness of consumers is resulting in an increased demand for vegetables. Population is increasing throughout the Southeast. The area is a deficit producer of most vegetable and small fruit crops.

Historically, the Southeast has produced vegetables and small fruits. However, research is needed to develop improved varieties and production procedures to realize the higher yields possible in the region. With a few exceptions, such as pickling cucumbers, tomatoes, and sweet potatoes, production has been primarily for fresh market and directed mostly to local consumption. If vegetable production is to be expanded, there is a critical need for an evaluation of production systems and marketing alternatives. The potential for increased sales in the population centers of the Eastern U.S. must be thoroughly investigated. The feasibility of developing a vegetable processing industry must also be studied. The expansion of the processing industry would produce added value and stimulate employment in the region.

The basic questions are how competitive can the Southeast be in the production of vegetables, and which vegetables are the most competitive? Georgia, North Carolina, and South Carolina have joined together in a research and education effort to provide the agricultural sector with needed information on the economic and biological potentials for producing and marketing certain vegetables. The objectives of the project are:

1. Identify commodities which have the most potential for expansion.
2. Develop production practices and determine the feasibility of competitively producing specific vegetable crops on family farms in the three state region.
3. Evaluate alternative domestic and international markets for new and expanded production of selected vegetable crops.
4. Develop and disseminate specific recommendations on expanded production of vegetable crops.

Let me briefly discuss the current status of our research. This effort is truly regional in that six academic departments in three universities are engaged in a cooperative and closely coordinated research effort. It is interdisciplinary with horticulturists and agricultural economists working together in the establishment and execution of goals. Field trials are being conducted at seven sites in the three states; two each in North Carolina and Georgia, and three in South Carolina. Market analysis, to determine the market potential of various vegetable crops, is being carried out by agricultural economists at Clemson, Georgia, and N.C. State. Biological and economic research dealing with integrating vegetable and traditional crops such as soybeans, cotton, and tobacco, is being conducted.

It is important to note that production and marketing possibilities are being considered simultaneously. If markets are available but production is not economically feasible or vice versa, the crop will not be considered further. This will provide both farmers and agribusiness firms with a better idea of both the biological and economic feasibilities of producing vegetable crops.

Previous research under this project has identified several crops with potential for providing Southeastern farmers with viable options. Data from two years of plot work is in computer data files in preparation for analysis this spring. Progress is being made in the development of cropping systems for farmers. Future plot work will address management and cultural practices. Specific production problems have been identified that will be studied by interdisciplinary teams. An example is the improvement of stand establishment for fall cauliflower during the summer months. A large national processor has shown interest in the production of cauliflower in the tri-state area, but the production season needs to be expanded. Another example is research on heat tolerant varieties of broccoli. Processors are interested in acquiring this commodity but the season needs to be lengthened.

Market window analysis indicates there are potentially favorable windows for snap beans, green peppers, and cabbage. Preliminary estimates have been made of market flexibilities to determine how much prices can be expected to decrease with increases in market volume. This work needs to be refined. Preliminary results indicate that in certain seasons volume could increase with little impact on price. For example, the analysis for cabbage and bell peppers indicates there is a significant relationship between the expected impact on price and the time of shipment, with the larger impacts occurring in late spring and summer. One of the primary objectives of this research is to investigate the feasibility of changing planting dates so commodities can be harvested when prices are less sensitive to changes in quantity. Development of price flexibilities is crucial in identifying seasons in which particular commodities can be profitably marketed. Further research would provide more precise estimates and allow an analysis of the strength of demand for commodities during particular seasons.

A preliminary report of a survey of first handlers of vegetables has been prepared. Information from this survey has been used to develop a structural analysis of vegetable markets. The firms are classified according to the functions they perform; how, when, and where they operate; and their size relative to other firms, and to the market as a whole. The commodities handled are defined in terms of the source of supply, and the market where sold. The potential capacity of these firms to handle expanded production is being evaluated. Respondents were asked their willingness and requirements for dealing with new suppliers. This information will help to determine the industry requirements for dealing with new suppliers, that is such things as quantity requirements, grade standards, and variety preference. A survey of grocery store chains is also being conducted to investigate the requirements necessary for producers to access this potential market.

Information has been collected on current international markets for vegetables. Discriminant analysis was performed on data generated by a survey of 2,000 foreign importers in order to distinguish the major differences in market infrastructure among Asia, the European Economic Community (EEC), non-EEC Europe, and Latin America. Preliminary results indicate that the greatest potential for the U.S. to increase its export market share exists in Asia and the EEC. Approximately 88% of the Asian importers and 60% of EEC importers predicted increasing imports. This analysis provides insight into the future international demand for U.S. vegetables.

Programming work is complete on the first phase of a two part effort to develop a whole farm planning tool for vegetable producers in the tri-state area. The completed phase focuses on development of a microcomputer program to assist farmers in developing crop cost and return estimates. The program will operate on a microcomputer, and requires no knowledge of computers or crop budgets for a farmer to use. The program will, among other things, allow farmers to estimate indirect expenses, such as machinery and equipment costs, and compare profitability levels for single or double cropping alternatives. The program will permit growers to evaluate "what if" alternatives by allowing changes in costs, prices, and acreage.

Currently activities are focusing on linking the budgets generated from this program with an existing linear programming routine to provide producers with a tool to develop whole farm budgets and plans. In effect, farmers can develop enterprise budgets for alternative crops, identify their primary resource limitations, and the program will determine those crops that should be grown to maximize net income. Testing and evaluation of the program will be conducted with the assistance of county extension agents in the tri-state area. Both models require considerable biological and economic data

A quadratic programming model is being developed to discern the relative competitiveness of traditional row crops and the vegetable crops investigated in this study. The model contains four regions and monthly time periods to encompass the extremes in climate between southern Georgia and the mountains of North Carolina. The model considers demand, supply, variable costs, risk, and land constraints. Information from both the horticulturists and economists is also necessary for this model.

This project does not stand alone. Several agribusiness firms have expressed interest in supporting additional research. All indications are that the high level of interest in this project by farmers, agribusinesses, and leadership will continue. The major concern is to have sufficient research results available to provide the needed assistance.

There has been an effort to disseminate information to interested farmers, agribusinesses, community planners, and leaders as soon as possible. There have been a number of presentations before farm groups, field days, and numerous newspaper interviews and articles concerning the project. Two video tapes on sequential cropping systems and plastic mulch cultural practices have been developed for instructional use by Agricultural Extension Agents.

Although the research is being conducted in the three states of Georgia, North Carolina, and South Carolina, the results will transcend state boundaries. The physical input-output relationships should be transferable with only minor modification. The close linkage and cooperation between states, and between the research and educational activities of two disciplines serves as a model for future collaborative efforts. This research has stimulated research in other areas of the country.

The research is oriented toward providing farmers and agribusinesses timely information on vegetable production and marketing opportunities. Information forthcoming will be directly applicable to farm situations so that the adoption of the production and marketing systems should be relatively straightforward. The potential gains to farmers are great. If it appears that certain crops can be produced and marketed profitable during a window within the season, it should augment farm income. Any estimate of the amount that farm income would increase is only speculation at this stage of the research. However, if farm income increased by $100 per acre as a result of producing vegetables, it would require only 10,000 acres to amount to a one million dollar gain. This is indeed small acreage in view of the fact that one percent of the soybean acreage in the three states amounts to more than 60,000 acres. In addition to the farm sector, there are potential gains to the transportation and handling sectors, and to the processing and agricultural supply sectors. Fruits and vegetables have one of the highest "value added" multipliers in the agricultural sector.

The next phase of the project will be involved with the development of a program of implementation. Specific strategies will be effectuated. Possibilities include working directly with potential buyers of specific products for particular uses. The transfer of production information will be accomplished by typical methods as well as through more direct involvement; perhaps assistance to groups of producers in the establishment of cooperative pack houses and in the marketing of their production.

Decisions are being made on which crops have the most potential for inclusion in cropping systems. Plot work needs to continue to thoroughly investigate cultural practices for these crops. Detailed analysis at the farm firm level needs to be conducted to estimate impacts on income and income variability, i.e. risk, of including the recommended vegetable crops. The marketing analysis is of crucial importance and needs to be emphasized and completed. Economies of size for producers, pack houses, and marketing firms needs to be studied. The implementation plan needs to be developed through the cooperative efforts of research and extension workers, business firms interested in vegetable crops, and agencies of state government.

The support for this project is appreciated. The research has been successful up to now in meeting its objectives, but is now at a critical point. Research results need to be refined and the important implementation process accomplished. For these reasons, the budget request for FY 1988 is $450,000. The opportunity to make this presentation is appreciated, as is your support for this project. We feel the Tri-State Vegetable project is of vital importance to the farmers of the southeast.

STATEMENT OF DR. O.J. DICKERSON

Mr. Chairman, Members of the Committee, I appreciate the opportunity to appear before this committee.

I will testify to request continued support through a special grant ($200,000 for 1988) for Peach Tree Short Life research in the Southeast to be centered at Clemson University. This project has been funded previously through special grants.

A disease syndrome responsible for premature death of peach trees in southeastern United States, and other peach growing areas, is characterized by sudden collapse in the springtime of otherwise apparently healthy trees, usually just before, during, or just after bloom. Because the contributing factors to early tree mortality are numerous and their interactions complex, a somewhat amorphous term "Peach Tree Short Life" has been used to describe this disease.

Peach tree short life adds a significant, chronic burden to cost of peach production. More than 100,000 trees die in the region each year, often before costs of orchard establishment are recovered. Financial losses annually from tree death exceed $7 million, and additional undetermined losses accrue from reduced growth of young trees, lower yields of fruit during the first 4 to 5 years of production and costs of nematicide treatments. More than two-thirds of the peach acreage in the three-state region potentially suffers from the peach-tree-short-life syndrome.

Fifteen years ago peach tree short life was often regarded as a mysterious disease. Causes were unknown and the disease was virtually uncontrolled. The major limitations to effective implementation of the control program relate to high costs and lack of adequate means to control nematodes and dimming prospects for effective nematode control in the near future. Even so, other parts of the control program, such as care in rootstock selection, pruning time, and the maintenance of soil pH at desirable levels, exert beneficial effects to the extent that tree losses are perhaps half of what they would be without a control program

In the absence of short-term measures to control nematodes, especially the ring nematode, Criconemella xenoplax, longer-term objectives have become increasingly focused upon measures to reduce dependence upon chemical nematicides. Nematode resistance is very attractive because it is inexpensive to implement, and is easily adopted by farmers. Its major disadvantages are the long-term commitment that is necessary to develop and bring to commercial use resistant rootstocks and the large capital investment that is required. Research completed thus far indicates that resistance is a feasible objective within 10 to 12 years. Ground cover research also has attractive features because the objectives coincide with erosion conrol practices. Biological control through the use of microbial parasites is a third alternative, but the use of such agents for effective and reliable control appears to be many years in the future.

The main objective of the research for which support is solicited is to expand current efforts to screen germplasm of peaches and related species for resistance to the ring nematode. A germplasm collection containing more than 700 genotypes is being screened for resistance to C. xenoplax in the field and greenhouse. In greenhouse tests, procedures will be revamped to enable more careful, systematic evaluation of susceptibility. Revisions will include development of smaller but effective containers that will conserve greenhouse space and thus enable more seedlings or cuttings to be tested simultaneously; more effective placement of inoculum so that the nematode population on susceptible plants can reproduce more rapidly and thereby reduce the time required for evaluation of reproduction potential; and development of nondestructive sampling procedures so that plants supporting lower populations can be replanted for study over a longer period of time. Development of these procedures will enable more exacting evaluation of susceptibility through more precise measurement of the rate of population increase and preserve the plants found to have potential for resistance without the requirement to go back to the parent for further propagation material.

In addition to ~~greenhouse~~ and field tests, laboratory screening tests may have potential in a breeding program through identification of biochemical markers that can be used to identify quickly possible sources of nematode resistance. The responses of peach propagules or seedlings to feeding of C. xenoplax will be investigated in terms of changes in protein synthesis, both quantitatively and qualitatively.

Two other objectives will be pursued concurrently. One will be to expand current research to improve peach orchard cover crops to reduce nematode populations and control soil erosion. This will be done by field testing nonhost plants to examine their potentially beneficial influences on suppressing the nematode population. And we will study the mechanism of nematode suppression by certain nonhosts to determine whether biologically suppressive natural substances can be utilized in control.

Nematicides are still an alternative for a few growers. We propose to explore ways to more effectively and safely use those nematicides.

We hope this brief and even oversimplified summary of the peach tree short life situation conveys that there is an important problem to be dealt with. Much progress has been made. We believe we are on a good track and that good results can be obtained.

Thanks for the opportunity to speak with you. I would be pleased to try and answer any questions.

WASHINGTON STATE WHEAT GROWERS ASSOCIATION

STATEMENT OF DANA HERRON, PRESIDENT

ACCOMPANIED BY DENNIS OLDENSTADT, ASSOCIATE DIRECTOR, AGRICULTURAL RESEARCH CENTER, WASHINGTON STATE UNIVERSITY

Senator BURDICK. Our next witnesses will be Mr. Dennis Oldenstadt, associate director of the Agricultural Research Center at Washington State University, and he is accompanied by Mr. Dana Herron, president of the Washington State Wheat Growers Association.

Gentlemen, if you would come forward and proceed.

Mr. HERRON. Thank you, Mr. Chairman.

My name is Dana Herron, and I have with me today Dr. Dennis Oldenstadt. We are here on behalf of Washington State University and the wheat industry of the Pacific Northwest.

I would ask that my remarks be entered into the record in full.

The food and nutrition building on the Washington State University campus is now scheduled for construction starting in July 1987. The Washington State Legislature appropriated $13 million for phase I of the building during its 1985–87 biennial session. The 99th Congress graciously appropriated $2 million startup for phase II of this important building last year through the Research and Facilities Act as amended by section 1411 of the Food Security Act of 1985.

We are here today to request your support for federal funds totaling $11.079 million needed to complete phase II of the building. Your favorable response to this request will permit us to expand and continue the model federal, state, and private industry partnership that has been developed in the Pacific Northwest over the past decade.

The building now being planned will house federal and state scientists, state educators, and cooperative extension personnel dealing with the complex areas of food processing, distribution, and marketing in a worldwide context. Their work will include food marketing, processing, food quality, safety, human nutrition, and plant and animal biotechnology.

These program results will stimulate market development and enhance the efficiency and profitability of agricultural producers in Washington, the Pacific Northwest, and throughout the nation. But the benefits of these programs will flow also to consumers and marketers of food products throughout the state, the region, and the rest of the country.

The attached pages, entitled "Project Description," contain more complete information on the total scope of the programs to be housed in this new building. In the interest of time, we shall not read what will be available for you to read at your leisure. But there is one part of the planned building that is of particular interest to me as a producer of wheat for food and seed, and to the Association of Wheat Growers that I represent, namely, the Western wheat quality laboratory.

The final determination on the milling and baking characteristics of new germplasm and varieties and their suitability to consumers is provided by the Western wheat quality laboratory. It tests the milling and baking properties of these advanced lines to determine whether or not they fill the bill from the consumers' perspective. A new wheat quality laboratory is included in the building to meet our current and future needs.

Wheat growers in the Pacific Northwest have a long history of direct action to develop markets. We back this up with research support to the Agriculture Research Service and state land-grant universities, but our industry must do even more to tailor-make its products to fit consumer demand.

Just recently, wheat growers in the Pacific Northwest employed a wheat products specialist to further link consumer demand characteristics to the type of wheat that must be produced and binned in order to be competitive.

We must increase our ability to adjust production to worldwide consumer needs through wheat and cereal breeding programs and germplasm exploration and enhancement. These activities are being continued by federal and state scientists, with supplemental industry funding from our own wheat growers to researchers now totaling more than $300,000 in Washington state alone.

Completion of the food and human nutrition facility and the wheat quality laboratory will permit us to upgrade and enhance our testing and product development programs. A pilot food processing plant is included to provide similar research results to other commodity groups in the region, and throughout the nation, such as the fruits and vegetables area.

In summary, the building that is now being planned is as follows:

Phase I involves programs of food safety, food quality, and human nutrition, which has been funded by the Washington State Legislature at $13.798 million. We are requesting today that your committee fund phase II, dealing with programs of food marketing, wheat quality, post-harvest physiology, plant and animal biotechnology at the $13.8 million matching level.

This level of request assumes that $1.94 million is for startup construction costs as stated in the Congressional Record of October 15, 1986, for the project whose total cost is $13.079 million. The original phase II request of $10.4 million at 1985 prices has been inflated to reflect 1989 midconstruction costs.

We sincerely appreciate the opportunity to bring this important project to your attention. We shall be pleased to attempt to respond to any questions which you might wish to ask.

Thank you.

[The statement follows:]

STATEMENT OF DANA HERRON

Honorable Quentin Burdick and members of the Senate Subcommittee. My name is Dana Herron and I have with me Dr. Dennis Oldenstadt. We are here on behalf of Washington State University and the Wheat industry of the Pacific Northwest.

A Food and Human Nutrition Building on the Washington State University campus is now scheduled for construction starting in July, 1987. The Washington State Legislature appropriated $13 million for Phase I of the building during its 1985-87 biennial session. The 99th Congress graciously appropriated $2 million startup for Phase II of this important building last year under the Research and Facilities Act (PL 88-74) as amended by Section 1411 of the Food Security Act of 1985 (PL 99-198).

We are here today to request your support for federal funds totalling $11,079,000 needed to complete Phase II of the building. Your favorable response to this request will permit us to expand and continue the model federal, state and private industry partnership that has been developed in the Pacific Northwest over the past decade.

The building now being planned will house federal and state scientists, state educators and Cooperative Extension personnel dealing with the complex areas of food processing distribution and marketing in a worldwide context. Their work will include food marketing, processing, food quality, safety, human nutrition and plant and animal biotechnology. These program results will stimulate market development and enhance the efficiency and profitability of agricultural producers in Washington, the PNW and throughout the nation. But the benefit of these programs will flow also to consumers and marketers of food products throughout the state, the region and the nation.

The attached pages, titled Project Description contain more complete information on the total scope of the programs to be housed in this new building. In the interest of time, we shall not read what will be available for you to read at your leisure. But there is one part of the planned building that is of particular interest to me as a producer of wheat for food and seed, and to the Association of Wheat Growers that I represent, namely the Western Wheat Quality Laboratory.

The final determination on the milling and baking characteristics of new germ plasm and varieties and their suitability to consumers is provided by the Western Wheat Quality Laboratory. It tests the milling and baking properties of these advanced lines to determine whether or not they "fill the bill" from the consumers' perspective. A new wheat quality laboratory is included in the building to meet our current and future needs.

Wheat growers in the Pacific Northwest have a long history of direct action to develop markets. We back this up with research support to the Agriculture Research Service and state Land Grant Universities. But our industry must do even more to tailor-make its products to fit consumer demand. Just recently wheat growers in the Pacific Northwest employed a wheat products specialist to further link consumer demand characteristics to the type of wheat that must be produced and binned in order to be competitive.

We must increase our ability to adjust production to worldwide consumer needs through wheat and cereal breeding programs and germ plasm exploration and enhancement. These activities are being continued by federal and state scientists with supplemental industry funding to researchers now totalling more than $300,000 in Washington state alone.

Completion of the Food and Human Nutrition facility and Wheat Quality Laboratory will permit us to upgrade and enhance our testing and product development programs. A pilot food processing plant is included to provide similar research results to other commodity groups in the region such as fruits and vegetables.

In summary, the building that is now being planned is as follows:

Phase	Programs	Sq. Ft.	Cost	Funds
I	Food Safety, Food Quality, Human Nutrition	36,967	$13.798m	Funded by Washington State Legislature
II	Food Marketing, Wheat Quality, Post-Harvest Physiology, Plant & Animal Biotechnology	29,290	$13,079m*	Request for matching from federal funds

*Assumes $1,940,000 is "for start-up construction costs" as stated in the congressional record of October 15, 1986, for the project whose total cost is $13,079,000. (The original Phase II request of $10.4m at 1985 prices has been inflated to reflect 1989 mid construction costs).

We sincerely appreciate the opportunity to bring this important project to your attention. We shall be pleased to respond to any questions you may wish to ask.

PROJECT DESCRIPTION

Introduction and Project Relevance

The Food-Human Nutrition Facility (FHNF) at Washington State University is a new building program designed to house the programs of the College of Agriculture and Home Economics which deal with aspects of foods from harvest to consumption, including human nutrition and some aspects of marketing. The building has been designed in two phases, with a total of 66,257 net square feet or 131,000 gross square feet. The total estimated cost of both phases is $26.877 million. The building site is adjacent to Clark and Johnson Halls in the present Agricultural Sciences complex in the northeast section of the Pullman campus. (See Perspective and Site Plan, Attachment A)

Subject Matter Programs Included in the New Building

A. Food Marketing for Domestic and Foreign Markets

The University and College have a major thrust, IMPACT, (International Marketing Program for Agricultural Commodities and Trade) which is conceived as a program for improving sales of food products grown in the state and other Pacific Northwest states. This program calls for developing new methods of marketing, processing and utilizing wheat, fruits and vegetables, beef and dairy products suitable for export to the Far East as well as for domestic markets.

The Western Wheat Quality Laboratory (USDA-ARS facility) and Food Science and Human Nutrition Department plan to increase personnel to develop and test new processing methods for these commodities. The planned facility will improve the capabilities to enact this program by providing a new pilot food processing plant and a new Western Wheat Quality Lab. The latter facilities will also enhance the current service, provided federally, to wheat breeders, wheat scientists and domestic bakers by improving the capabilities to evaluate the new genetic varieties of wheat for their milling, baking and nutritionally acceptable characteristics. The new pilot plant will include controlled atmosphere storage for storing potatoes, apples and other fruits and vegetables to test the conditions for prolonging storage of fresh produce and bringing them to retail markets in peak condition, thus increasing sales.

B. Food Quality, Food Safety and Human Nutrition

The programs in research, teaching and extension in Food Quality, Food Safety and Human Nutrition have recently been merged into the new department of Food Science and Human Nutrition. These programs include research (both basic and applied) on cereal, fruit, vegetable and dairy products; research on human nutrition needs to prevent chronic disease and maintain good health, especially in the elderly; food additives and food supplements; and food safety. The food safety area will be enhanced in the new building by providing research laboratories in toxicology and microbiology. The capability of conducting human metabolic studies will be increased in the new facility by providing a new human metabolic unit, and nutrition biochemistry will be expanded to include tissue culture models. New facilities for testing the sensory properties of fresh and processed commodities will be included.

C. Animal and Plant Biotechnology

Basic biotechnology in agriculture involves the development of new biological concepts which can be applied to solving problems in agricultural production and efficiency. Genetic engineering provides tools to modify the genetic potential of microorganisms, plants and animals. Benefits of this work in the program at Washington State University include improved crop varieties, more rapid and diverse crop development, more productive animals, greater disease resistance, new nitrogen-fixing capabilities for plants and new products such as hormones to promote animal growth and health and improve efficiency in lactation and reproduction. The new building facility will provide new facilities for the biotechnology program in Animal Science and, by vacating the present facilities, will provide for expansion of the plant biotechnology program in the Institute of Biological Chemistry now housed in adjoining Clark Hall.

Phases of the New Building

Phase I

The first phase of the building program houses, in one location, the recently merged departments of Human Nutrition and Foods, and Food Science and Technology which now form the department of Food Science and Human Nutrition. These units are presently located at opposite sides of the campus, a distance which creates a lack of unity in the program. Phase I includes research and teaching laboratories, an office complex for the department as well as specialized research spaces such as the pilot processing plant, a sensory evaluation unit and human metabolic live-in unit. The first phase will meet the needs of the Food Quality, Food Safety and Human Nutrition Program in the College of Agriculture and Home Economics.

The net (usable) square footage for Phase I is 35,967 square feet or 73,600 gross square feet. Funding for this phase has been appropriated by the 1985 and 1987 Washington State Legislatures at the level of $12.798 million. An additional $1 million for furnishing "moveable equipment" has been requested and is included in Governor Gardner's Executive Budget for the 1987-1989 biennium. Phase I total funding is $13.798 million funded by state sources.

The building program document (155 pages) was completed in September, 1984, schematic drawings were completed in June, 1986; design development, December, 1986 and construction documents are to be completed May, 1987. Bids will be received June, 1987, construction will start July, 1987 with completion scheduled for January, 1989.

Phase II (See Attachment B for listing of spaces and square feet for Phase II)

The plan for the second phase of the facility includes:

1. Incorporation of the Western Wheat Quality Laboratory which will move six USDA-ARS scientists and support personnel from substandard, antiquated, (1915) overcrowded facilities in Wilson Hall to larger, new, modern laboratories.
2. Addition of pilot plant spaces to increase controlled atmosphere storage and processing facilities for potatoes, fruits and vegetables and research labs for post-harvest technology research; and
3. Addition of space for the animal biotechnology program. This phase will contribute to the Food Marketing and Biotechnology programs, already described, of both the state and federal programs. The phase will also allow for the expansion of overcrowded facilities in Johnson Hall currently housing USDA-ARS and state scientists in Plant Introduction and Agronomy. In addition, relocation from the facilities in

Clark Hall will allow for an increase in excellence in the plant biotechnology program.

Phase II will have 29,290 net square feet and 57,400 gross square feet. The estimated cost assuming a bid date of September 1989 is $13.079 million. This amount constitutes the request for matching USDA federal funds to compare to the Washington State funded Phase I of $13.8 million.

The university proposed design for Phase II will begin as soon as the additional federal funds are committed employing the current design team to maximize planning continuity and to reduce design time and fees. Any extended delay in funding Phase II could reduce opportunities for designing a cohesive building. "Add-on" research facilities especially for the Pilot Plant and the Wheat Quality Laboratory should be integrated into the comprehensive building. Inflationary and redesign costs can be avoided by sequential architectural planning and construction of both phases.

SIGNIFICANCE OF THE CONTRIBUTION OF THE MATCHING FEDERAL FUNDS

A. Significance to the University, College and Departments

The benefits to the University of the federal matching funds will be to accelerate a program of excellence in the areas of plant and animal biotechnology. While these programs have shown rapid progress in the last few years, their potential expansion is hampered by a lack of laboratory space and equipment to push forward on the cutting edge of science. The Department of Horticulture can improve the graduate educational program by providing facilities which enhance fruit and vegetable storage, processing and physiology research. The administration, extension, instruction and research programs of the new Food Science and Human Nutrition Department including the Western Wheat Quality Laboratory will be housed finally in one location. The international and national reputation of the University will be enhanced by the increased productivity and visibility of its state and federal scientists.

B. Significance to the Washington State, Regional Agricultural Industries and Consumers

The cereal, fruits, vegetables, beef, dairy and other commodity groups will all benefit from the new research, educational and extension programs arising from the housing of faculty-scientists in this new facility. The problems of turning surplus crop production, eg. soft wheat, apples, into marketable products will be addressed by both the Wheat Quality Lab (USDA-ARS) and by the fruit and vegetable post-harvest physiology groups. The problems associated with producing new and resistant varieties of wheat and more efficient beef and dairy cattle will be addressed at the basic level by scientists in the plant and animal biotechnology programs. The problems of producing high quality food products acceptable to consumers with their current high interest in dieting, nutrition in relationship to chronic diseases such as heart disease and cancer, taste and cost will be addressed by food scientists and nutritionists.

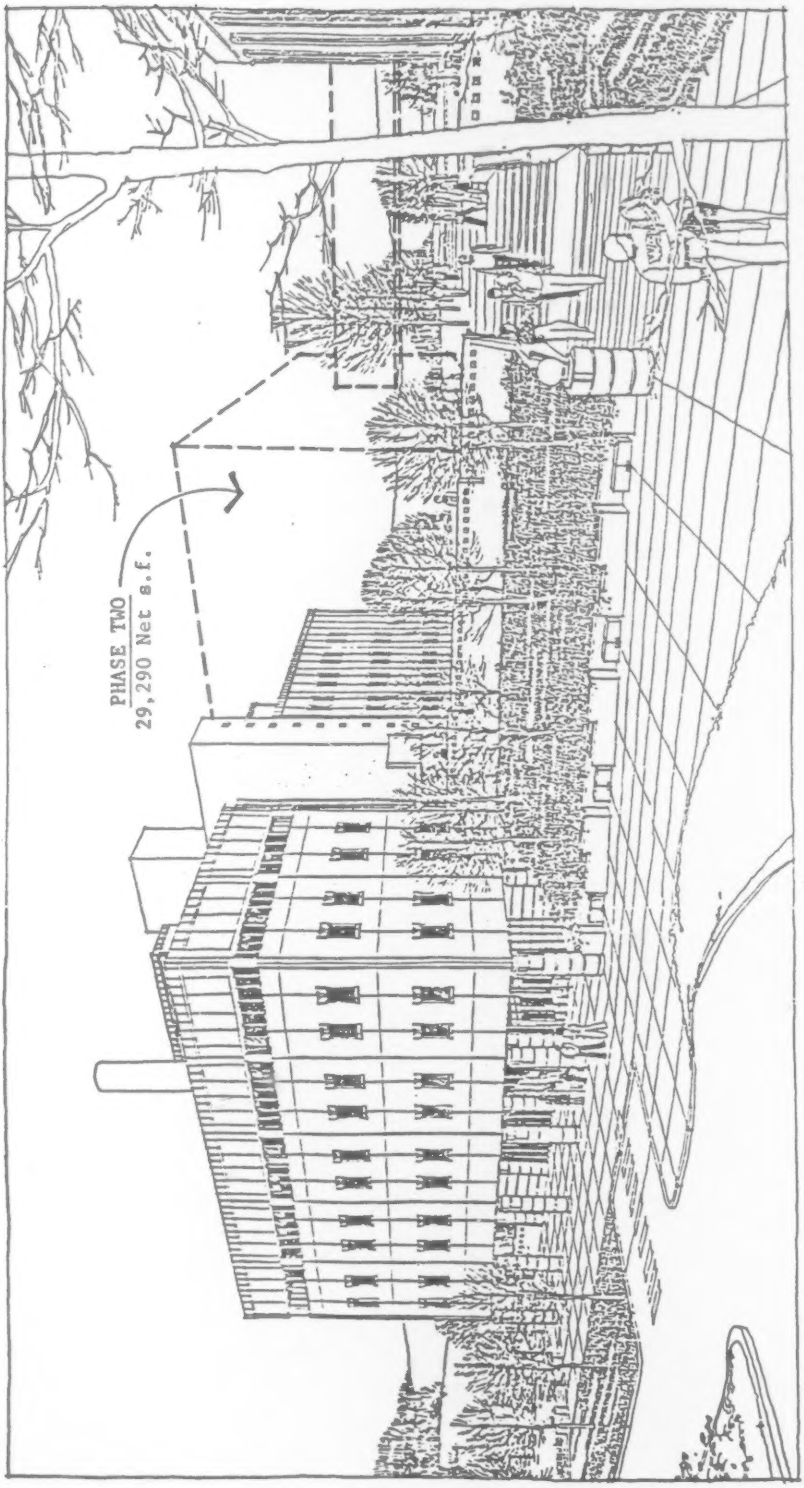
C. Significance to the Pacific Northwest (PNW) Region and the Nation

This facility will benefit and augment the cooperative ventures between the Pacific Northwest (PNW) states and the USDA-ARS Western Region agriculture program. The tri-states of the PNW (Washington, Idaho, Oregon) have a number of existing programs which coordinate research efforts among experiment station scientists and federal scientists. For example, there are 33 USDA-ARS scientists (of a state total of 74 scientists) in the Washington State ARS workforce who are housed with their support staff on the Pullman campus. These scientists cooperate in tri-state projects such as TCK smut of wheat, tri-state variety release programs, screening of wheat varieties from Oregon, Washington, Idaho, Montana and California for quality characteristics in milling and baking. They also cooperate closely in potato research, and in Soil Conservation programs (STEEP) for Palouse wheat and legume crops. The states of Oregon and Washington share Cooperative Extension specialists in Horticultural Tree Fruit crops, and Washington and Idaho are beginning a new program of exchanges on sheep/swine production research. Classes in these area are joint-listed between the two state universities and students interact with federal and state scientists in both locations. The Graduate Programs in Nutrition at Washington and Oregon State University are approved programs under the WICHE Program (Western Interstate Committee on Higher Education) whereby students from any state in the Western Region can obtain an advanced degree with reciprocal in-state tuition costs.

The Region will be enhanced by the building program at Washington State, since the opportunities for creative and cooperative interdisciplinary research, teaching and extension in the process between product harvest and consumer will be enriched.

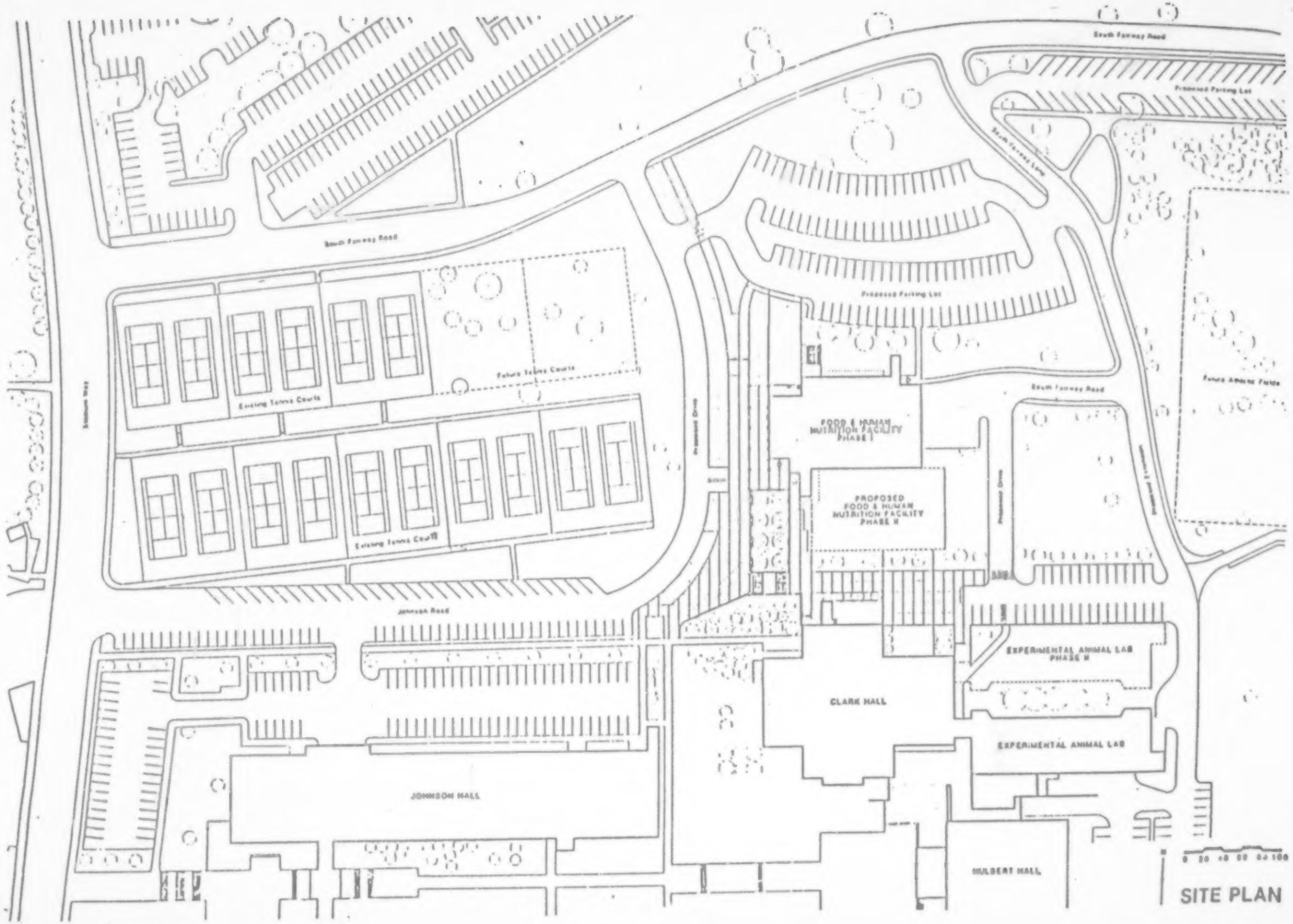
This also represents a unique opportunity in time for the national research coordination effort between USDA federal and state agricultural interests to match funding for a regionally and state supported Federal/State Research facility.

[ATTACHMENT A]


PHASE TWO
29,290 Net s.f.

PERSPECTIVE SKETCH FROM S.W.

[Attachment B]


SITE PLAN
0 20 40 60 80 100
South Fairway Road
Proposed Parking Lot
South Fairway Lane
Future Animal Fields
Proposed Parking Lot
South Fairway Road
FOOD & HUMAN NUTRITION FACILITY PHASE I
PROPOSED FOOD & HUMAN NUTRITION FACILITY PHASE II
Proposed Drive
Proposed Drive
Future Tennis Courts
Existing Tennis Courts
Existing Tennis Courts
South Fairway Road
Stadium Way
Johnson Road
EXPERIMENTAL ANIMAL LAB PHASE II
EXPERIMENTAL ANIMAL LAB
CLARK HALL
JOHNSON HALL
HULBERT HALL

SUBCOMMITTEE RECESS

Senator BURDICK. This concludes today's hearing. We appreciate greatly your having been here to offer testimony and to help us with the task of providing funding for the Department of Agriculture.

Our next hearing for congressional and public witnesses will be held tomorrow in this same room, beginning at 9 a.m. Until then, the subcommittee is recessed.

[Whereupon, at 4:40 p.m., Tuesday, April 7, the subcommittee was recessed, to reconvene at 9 a.m. Wednesday, April 8.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1988

WEDNESDAY, APRIL 8, 1987

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 9:02 a.m., in room SD-138, Dirksen Senate Office Building, Hon. Quentin N. Burdick (chairman) presiding.

Present: Senators Burdick, Sasser, and Cochran,.

NONDEPARTMENTAL WITNESSES

SUBCOMMITTEE PROCEDURE

Senator BURDICK. The subcommittee will please come to order.

This morning, we continue our hearings on the appropriations for the Department of Agriculture and Related Agencies.

We appreciate your appearing before the committee to give us your thoughts on the agencies under our jurisdiction. Your comments will be helpful to us as we work to appropriate funds for these agencies.

I must remind the witnesses that the subcommittee cannot receive any copyrighted material for publication unless arrangements have been made in advance to obtain the permission of the copyright owner that those materials be included in the hearing transcript. This notice is given to protect copyright owners, as well as the subcommittee and witnesses.

I also want to remind the witnesses that we have a large number of witnesses and, therefore, have to limit the time for testimony. The statements of each witness will be made part of the hearing record in full. Therefore, you are asked to summarize your testimony if it is lengthy. Each witness will be allowed 5 minutes for oral comments and it would be appreciated if you would keep your eye on the stoplight up here to comply with the limitation.

We will now hear from our famous Senator from Nebraska, the Honorable J. James Exon, U.S. Senator from the state of Nebraska.

CONGRESSIONAL WITNESS

STATEMENT OF HON. J. JAMES EXON, U.S. SENATOR FROM NEBRASKA

Senator EXON. Thank you very much, Mr. Chairman. I am delighted to be here this morning for what I believe is a very important consideration for your committee.

Mr. Chairman, as you know from your own good people of North Dakota, rural America is facing one of the most difficult challenges, certainly the most difficult since the 1930's.

Although the best answer for improving the agricultural economy, as you know first hand very well, is better prices for commodities, we cannot ignore other opportunities for simultaneously addressing the situation. With that thought in mind, I would like to call to your attention, and the rest of the members of your committee, two important areas, which I believe merit the committee's support.

As you know, section 1440 of the 1985 farm bill provides authority for special grants to dislocated farmers. That legislation was certainly a step in the right direction at a time of great need.

Even before passage of that legislation, Nebraska was a leader in establishing its Agriculture in Transition Program. Operating out of our community college system, Nebraska's program is designed to help farmers, agricultural workers, and their families to look at options for the future. With a placement rate, Mr. Chairman, of nearly 80 percent, Nebraska's extra efforts have proven very effective.

The continuing need for Nebraska's program and similar ones in other states leads me to conclude this effort could most effectively be funded by special grants to those state entities operating transition programs. In Nebraska, this would mean the state's department of labor. The funding and expansion of these programs could be accomplished under discretionary authority that the Secretary of Agriculture has right now.

Last year, Congress earmarked $500,000 for Nebraska's program, thereby, fulfilling the legislative intent expressed in the 1985 farm bill and sending a strong signal about Congress's commitment in this area. Therefore, I think that it is wholly appropriate that an increase of $1 million be available for Nebraska's program in 1988.

I will further suggest to the Secretary of Agriculture that he actively use Nebraska's program as a model for the development and enhancement of similar programs in other financially distressed agricultural states.

The second item that I would like to call to your attention, Mr. Chairman, is a proposed joint project by the University of Nebraska and Kansas State University. Technology must be expanded in order to provide meat products which exhibit those qualities that today's consumers demand and expect.

Both universities are internationally recognized for their meat research programs. A joint effort in this area of value added meat products would be extremely effective. Included in this joint project would be research of techniques to enhance consumer acceptability of value added meat products. Other subjects would include work to control product texture and stability, with emphasis on convenience and ease of preparation.

I will say, Mr. Chairman, if you could get in to this area, I believe we could begin to see further exportation of American farm and meat products overseas.

These two institutions have proposed a 2- to 5-year effort which would require annual funding of $250,000. This funding would be matched with other resources to provide a research project based largely on current faculty and staff, and utilizing facilities now in place. The funds would be used to expand current programs into areas of expertise not now represented on their respective campuses.

A project of this nature would be extremely wise from an investment standpoint, and would help to provide much needed profitability for the nation's important livestock industry.

In closing, Mr. Chairman, there are many things that Congress should be doing to improve the economic conditions facing our farmers and ranchers. These are but two areas which I feel strongly deserve our support as we face up to the monumental problems now taking their toll on the farmers, ranchers, and Main Street businesses all across rural America.

Mr. Chairman, I appreciate very much the consideration you have given in the past to programs of this nature. As an influential son from the of midland states, I would ask you and your colleagues to take a careful look at the programs that I have discussed here this morning.

Thank you very much.

Senator BURDICK. You may be sure, Senator, that we will take a very careful look.

Thank you.

NATIONAL HOME BUILDERS ASSOCIATION

STATEMENT OF LARRY SWANK, COUNCIL CHAIRMAN, NATIONAL HOME BUILDERS ASSOCIATION

Senator BURDICK. We will now proceed to our next witness, Mr. Larry Swank. Mr. Swank, please proceed to the witness table. Mr. Swank represents the National Association of Home Builders. Welcome. You may proceed.

Mr. SWANK. Mr. Chairman and members of the subcommittee. My name is Larry Swank and I am a rural housing developer from Nappanee, IN.

I am pleased to be here to testify on the fiscal year 1988 appropriation for Farmers Home Administration rural housing programs this morning. It is a privilege to appear before you, Mr. Chairman, and to acknowledge your leadership in providing an effective housing delivery system to rural people.

I hope the Senate Appropriations Committee will follow the lead taken by the House Appropriations Committee in rejecting the administration's request for a cutback of $1.5 billion in fiscal year 1987 funding for rural housing programs as contained in the fiscal year 1987 supplemental appropriations bill, H.R. 1827.

If this 75 percent negative supplemental request is not rejected, low-income people in rural areas will be denied needed housing assistance with only 13,000 units constructed compared to the 55,000 units passed by Congress.

Mr. Chairman, we strongly urge this committee to fund adequately and support the Farmers Home Administration housing programs which have helped 2 million families, the elderly, and the handicapped afford housing in rural areas. Rural housing programs under FmHA have already taken tremendous cuts. They have been reduced by 50 percent since 1980 and were cut 40 percent in fiscal year 1986 alone.

The administration's fiscal year 1988 budget again proposes termination of existing rural housing construction programs, including the section 502 single-family program, the section 515 multifamily program, and rural rental assistance. The budget substitutes $378 million for 21,200 vouchers specifically designated for rural areas to be administered by the Farmers Home Administration. The $378 million voucher proposal represents a reduction of 90 percent in funding since 1980. A voucher program will not substitute for the CRS documented need for 375,000 new units of housing in rural areas.

Today, the need for rural housing also continues unabated due to lack of credit in rural areas, the disproportionate share of substandard housing and the need to serve low-income families and the elderly.

Additionally, nationwide the 39,000 newly constructed section 502 and section 515 units last year produced 48,000 jobs and $410 million in federal, state, and local taxes.

We hope that this committee will support continuation of funding for rural housing programs at fiscal year 1987 levels next year.

I would also like to comment on our opposition to legislation which retroactively eliminates a borrower's contractual right to prepay FmHA rental housing loans. Legislation passed in 1980 permitted the prepayment of FmHA section 515 rural housing loans made prior to December 21, 1979, while putting a 20-year prepayment if comparable housing in the area is available, rents do not substantially increase or displacement does not occur.

Mr. Chairman, we oppose legislation introduced in the House of Representatives, H.R. 1070, which requires a builder to sell his property to a nonprofit organization and calls for a deeper subsidy than currently allowed so that tenants pay no more than 30 percent of income for rent. The additional rental assistance would only be available in projects owned by a nonprofit organization.

The legislation provides for a sale at fair market value but does not require a certified appraiser to evaluate the property. The property would likely be severely discounted if a nonprofit is the only buyer. This program will restrict a project owner from selling his property to any buyer and will have substantial additional costs. The buy-out provisions of H.R. 1070 and the deep rental subsidy could cost an additional $225 per unit per month, according to FmHA estimates.

Development of incentives to encourage proper maintenance and retention of the current stock of federally assisted housing available for low-income households is urged by NAHB. We believe that tenant displacement is not a large and universal problem and would expect that prepayment on loans made prior to 1980 should be allowed to continue.

And, finally, if deep subsidy is to be provided, as proposed in H.R. 1070, it is also needed by tenants who suffer from tremendous rent burdens. Mr. Chairman, some of these families are paying up to 50 percent of their monthly income for rent and utilities. FmHA estimates that there are about 100,000 families who are paying over 30 percent of their income for rent. Such assistance is also needed for those in distressed areas who cannot afford housing. There are almost 1,000 projects, 12,000 units, with high vacancies that otherwise risk foreclosure.

In this regard, we would be supportive of legislation which would authorize that additional units be assisted in a project under existing contracts where authority will not be fully utilized before the contract expires.

NAHB's Rural Housing Council has defined some of the rural housing issues both in the short and long term and they are included in my prepared text, which you have before you. I would like to take this opportunity to briefly expand on one of them with you.

We are concerned with the lack of consistent funding for rural programs both by the administration and Congress. Additionally, we are concerned that funding levels appropriated by Congress are not being spent on a timely basis.

Your continued assistance in trying to provide consistent levels of funding for rural housing programs and in seeing that funds are allocated on a timely basis would be appreciated. One-half of the fiscal year is over and only 23 percent of the funds have been spent, the lowest in 9 years.

Before concluding, I would like to comment in opposition to testimony given before the subcommittee earlier this week which would cut back on the number of new units constructed under the section 515 program. We oppose the transfer of $115 million from Section 515 to be used for rental assistance on conjunction with the tax credit.

While we recognize the need for additional rental assistance funds, as I earlier testified, we do not feel that they should be taken from funds appropriated to construct new units for low-income families in rural areas. If the tax credit is not workable without additional assistance, the solution is for FmHA Section 515 projects to automatically receive the low income tax credit if they meet FmHA program requirements.

Rural housing programs have had a record of great achievement in serving the shelter needs of rural Americans. They have provided an effective mortgage delivery system for new residential construction critical to providing needed accessibility to credit. They are providing the housing safety net for lower income Americans.

We urge Congress and this subcommittee to support adequate funding for rural housing programs and to maintain the current FmHA rural housing credit and delivery system.

Thank you for this opportunity to present our views. I will be happy to respond to any questions that you might have.

Senator BURDICK. Thank you very much.

Can you tell me to what degree housing loans used by your organization are in default?

Mr. SWANK. In the 502 program, during the past 4 to 5 years, there was as high as 14 percent default and delinquent ratios. It is hard to differentiate between the two from the statistics we are getting from Farmers Home Administration.

On the 515, rural rental housing, it is less than 3 percent default or deliquency at the present time.

Senator BURDICK. What are your views on the administration's proposal to sell Farmers Home Administration loans to the public?

Mr. SWANK. We have looked at it, and to the extent that we have reviewed it, we don't believe it is feasible and in the best interest of the program itself. At this point, I don't fully understand in-depth what the consequences will be but only from the standpoint that we see the payback of these loans taking care of the obligations that the government has made to borrowers, and that there are not the facilities in place at the present time to sell the loans.

Senator BURDICK. Thank you very much.

Mr. SWANK. Thank you.

[The statement follows:]

STATEMENT OF LARRY SWANK

My name is Larry Swank and I am a rural housing developer from Nappanee, Indiana. I am Chairman of the National Association of Home Builders Rural Housing Council and am appearing before you on behalf of the 145,000 members of the National Association of Home Builders. I have been involved in the Farmers Home Administration (FmHA) Section 515 rental housing program for 12 years and have built approximately 1,600 rental units.

I am pleased to be here to testify on the FY'88 appropriation for the Farmers Home Administration (FmHA) rural housing programs. It is a privilege to appear before you, Mr. Chairman, and to acknowledge your leadership in providing an effective housing delivery system to rural people.

I hope that the Senate Appropriations Committee will follow the lead taken by the House Appropriations Committee and reject the Administration's request for a cutback of $1.5 billion in FY'87 funding for rural housing programs as contained in the FY'87 Supplemental Appropriations bill, H.R. 1827. If this 75% "negative supplemental" request is not rejected, low income people in rural areas will be denied needed housing assistance.

RURAL FUNDING

Mr. Chairman, we strongly urge this Committee to fund adequately and support the Farmers Home Administration (FmHA) housing programs which have helped two million families, the elderly and the handicapped afford housing in rural areas. The conditions which gave rise to authorization for FmHA to make housing loans in 1949 still exist today, but the Administration's commitment to providing housing in rural areas is in serious doubt.

Rural housing programs under FmHA have already taken tremendous cuts. Rural housing programs have been reduced by 50% since 1980 and were cut 40% in FY'86 alone.

FY'88 Budget Proposals: The Administration's FY'88 budget again proposes termination of existing rural housing construction programs, including the Section 502 single family program, the Section 515 multifamily program and rural rental assistance. The budget substitutes $378 million for 21,200 vouchers specifically designated for rural areas to be administered by the Farmers Home Administration. The $378 million voucher proposal represents a reduction of 90% in funding since 1980.

The 75% cutback of $1.5 billion recommended for FY'87 funding would result in a program level of only $668 million for this year. This would support about 13,000 units for all rural housing programs in FY'87 instead of the 55,000 units passed by Congress.

As shown in the following table, the Section 502 program and the Section 515 rental program would be cut by three-quarters in FY'87 and eliminated in FY'88 under the Administration's proposal. While the Administration's budget does not recommend changes in rental assistance payments in FY'87, they would be completely eliminated in FY'88.

RURAL HOUSING FUNDING
(In Millions)

	FY'87 Approp.	FY'87 Admin. Proposed Cut	FY'87 Admin. Program Level	FY'87 Admin. Percent Cut	FY'88* Admin. Proposal
Rural Housing Insurance Fund	$2,033	-$1,525	$668	75%	-0-
Section 502 Single Family Program	$1,340	-$1,005	$335	75%	-0-

Section 515 Multifamily Program	$670	-$503	$167	75%	-0-
Rental Assistance	$160.3	-0-	$160.3	-0-	-0-

* The Administration budget only provides $378.13 million for 21,200 vouchers in FY'88.

The need for rural housing continues unabated due to lack of credit in rural areas, the disproportionate share of substandard housing and the need to serve low-income families and the elderly.

Additionally, nationwide the 39,000 newly constructed Section 502 and Section 515 units built last year produced 48,000 jobs and $410 million in federal, state, and local taxes.

We hope that this Committee will support continuation of funding for rural housing programs at FY'87 levels next year.

Vouchers: Mr. Chairman, there are a number of reasons why a voucher system as proposed by the Administration will not work in rural areas. First, a voucher does not provide badly needed new construction units in rural areas. The Congressional Research Service (CRS) projects a housing shortage in rural areas of 375,000 units between 1986 and 1990. Because of this, a slow rate of replacement of inadequate housing would occur with "fewer choices of alternative quarters for young households and those who desire to move". Second, rural areas do not have adequate housing stock to support a voucher system and in many areas there is no affordable housing even with a voucher.

In addition, a voucher may be even more expensive than the Section 502 single family program. The Administration's estimated cost for a voucher for one year in rural areas is $3,567. The Section 502 program cost per year, however, is estimated at $2,900. We urge the Subcommittee to reject the Administration's proposed voucher system which would replace the traditional rural housing construction programs.

SECTION 515 PREPAYMENT

NAHB opposes legislation which retroactively eliminates a borrower's contractual right to prepay FmHA rural rental housing loans. Legislation passed in 1980 permitted the prepayment of FmHA Section 515 rural housing loans made prior to December 21, 1979, while putting a 20 year prepayment limitation on all subsequent loans which we supported.

Legislation passed in 1986, however, places a nine month moratorium through June 30, 1987 on the prepayment of Section 515 multifamily housing loans made prior to December 21, 1979. This legislation only allows prepayment if comparable housing in the area is available, rents do not substantially increase or displacement does not occur.

Mr. Chairman, we oppose legislation introduced in the House of Representatives, H.R. 1070, which requires a builder to sell his property to a nonprofit organization and calls for a deeper subsidy than currently allowed so that tenants pay no more than 30% of income for rent. The additional rental assistance would only be available in projects owned by a nonprofit organization.

The legislation provides for a sale at "fair market value" but does not require a certified appraiser to evaluate the property. The property would likely be severely discounted if a nonprofit is the only buyer. This program will restrict a project owner from selling his property to any buyer and will have substantial additional costs. The buy out provisions of H.R. 1070 and the deep rental subsidy could cost an additional $225 per unit per month, according to FmHA estimates.

Development of incentives to encourage proper maintenance and retention of the current stock of federally-assisted housing available for low-income households is urged by NAHB. We believe that tenant displacement is not a large and universal problem and would expect that prepayment on loans made prior to 1980 should be allowed to continue.

And finally, if a deep subsidy is to be provided, as proposed in H.R. 1070, it is also needed by tenants who suffer from tremendous rent burdens. Mr. Chairman, some of these families are paying up to 50% of their monthly income for rent and utilities. FmHA estimates that there are about 100,000 families who are paying over 30% of their income for rent. Such assistance is also needed for those in distressed areas who cannot afford housing. There are almost 1000 projects (12,000 units) with high vacancies that otherwise risk foreclosure.

RURAL HOUSING ISSUES

NAHB's Rural Housing Council has defined some of the rural housing issues both in the short and long term and I would like to take this opportunity to share them with you.

- Address the lack of consistent funding for rural housing programs by the Administration and Congress.
- Fund existing programs that are authorized but not funded, such as the Section 502 guaranty program.
- Provide adequate funding for rental assistance to existing projects and provide assistance for new construction.
- Address the loss of funds allocated to programs not being used, including the transfer of those funds to other rural housing programs.
- Develop alternative methods of financing for rural housing programs including secondary market participation, tax exempt financing, HUD and other government financing including state and local government funding.
- Develop a demonstration program under both Section 502 and Section 515 to allow guaranteed private sector financing of loans rather than the current direct loan program under the Farmers Home Administration (FmHA). FmHA will continue to provide interest credit.
- Develop adequate tax incentives.
- Develop a level playing field for profit and nonprofit developers and builders under rural housing programs.

CONCLUSION

Rural housing programs have had a record of great achievement in serving the shelter needs of rural Americas. They have provided an effective mortgage delivery system for new residential construction critical to providing needed accessibility to credit. They are providing the housing safety net for lower income Americans.

We urge Congress and this Subcommittee to support adequate funding for rural housing programs and to maintain the current FmHA rural housing credit and delivery system.

Thank you for this opportunity to present our views. I will be happy to respond to any questions.

NORTH AMERICAN SECURITIES ADMINISTRATORS ASSOCIATION

STATEMENT OF PHILIP A. FEIGIN, ASSISTANT COMMISSIONER OF SECURITIES, COLORADO MEMBER

Senator BURDICK. Our next witness is Mr. Philip A. Feigin, assistant commissioner of securities for Colorado, and a member of the North American Securities Administrators Association.

Mr. FEIGIN. Thank you, Mr. Chairman, for allowing me to appear before you today.

My name is Philip A. Feigin, and I am assistant commissioner for the Colorado Division of Securities, and I serve as a member of the Advisory Committee on State/CFTC Cooperation, and as chairman of the Commodities Committee of the North American Securities Administrators Association, NASAA.

NASAA is a nonprofit corporation composed of the securities administrators of the 50 states, the District of Columbia, the Canadian Provinces, Mexico, and Puerto Rico. As an organization, NASAA is committed to investor and consumer protection. I am here today to speak in support of the Commodity Futures Trading Commission and the proposed appropriation for the Commission in the next fiscal year.

The level of cooperation between the states and the CFTC is at an all-time high. Our concerned efforts in the interests of investor and consumer protection should serve as a model of cooperation for other state and federal agencies.

To begin, the CFTC and the states continue to conduct joint investigations and to bring joint enforcement actions around the country. As experience grows, the States are more able to shoulder their fair burden in the fight against commodities fraud.

In addition, the CFTC willingly provides advice, testimony, interpretive assistance, enforcement data, liaison with foreign jurisdictions, and other technical help to the states. The enforcement division continues to conduct training seminars for state employees on an annual basis, and has conducted specific training programs in particular jurisdictions on request.

The Commission has devoted significant resources, time and effort to the adoption by the states of the Model State Commodity Code. The code represents a rare if not unprecedented example of cooperation between federal, state, and self-regulatory agencies and industry in developing and promoting consumer protection legislation. Chairman Phillips, Commissioner West, and the CFTC's General Counsel's Office are to be commended for their support and efforts regarding the code.

The Advisory Committee on State/CFTC Cooperation is another example of the extent to which state involvement is sought by the Commission. In an area as complex as the futures industry, it is all too easy to become preoccupied with the likes of audit trails, triple witching hours, stock index futures and similar esoterica, at the expense of the man-on-the-street consumer. The Advisory Committee provides a public forum for addressing those perhaps more pedestrian but not less important concerns.

State CFTC cooperation is excellent, and certainly it must be so, because our current tasks seem almost impossible and the future looms even more ominous. One need only pick up a newspaper to find evidence of serious threats to the sanctity and reliability of our financial markets. The credibility of our market participants is slippinig daily.

At the same time, the pressures to expand products and to expand and legitimate so-called off-exchange products is mounting. Unless action is taken to curb it, leverage will likely expand in the next few years. Currency forward contracts have gained visibility. Price sensitive investments are being created faster than they can be categorized.

Banks are making loans to investors to purchase precious metals under arrangements which startlingly resemble leverage and future contracts. There are an estimated 200 active boiler rooms in southern California alone selling off-exchange instruments in blatant violation of the law, but there are not enough resources to stop them.

In summary, the CFTC's work has been commendable. Their relationship with state authorities is a model for state-federal cooperation. The Commission faces some of its most important challenges in the year to come. Appropriate resources are essential so that they may meet those challenges. We urge you to approve the proposed CFTC appropriation.

Thank you.

Senator BURDICK. Thank you.

In your testimony, you refer to 200 boiler rooms in southern California that engage in selling off-exchange instruments in blatant violation of the law. How do you know about this?

Mr. FEIGIN. In 1985, I believe, the Department of Justice created a multijurisdictional task force in southern California, composed of the Orange County Sheriff's Department, U.S. Attorney's Office, the Los Angeles officials, California officials, the CFTC, and others.

At a conference, enforcement personnel in January of this year in California, one of the attorneys from the task force made a presentation to us, and he estimated at that time that there were more than 200 boiler rooms operating in the Orange County and southern California area. This is where I got the figure.

In past years, there has been concerted activity in Los Angeles and New York, certainly Fort Lauderdale. Statutory changes in Florida, and concerted enforcement efforts in Boston and New York before that led to a market reduction in boiler room activity in those states. Florida now reports fewer than 20 boiler rooms.

Unfortunately, the analogy is like hitting a bottle of mercury with a hammer, all that happens is that more of it spreads out, you never get rid of it. The boiler rooms from Florida moved to Dallas, and now to Los Angeles, and we expect to see some of this in Denver and Las Vegas. We have not stopped it, but we have moved it.

Senator BURDICK. How do you locate these boiler rooms?

Mr. FEIGIN. They are very easy to find, but it is very difficult to put them out of business. As soon as you subpoena the company, the company immediately closes. They are in a low-rent office building, and they close their doors. They reincorporate, add a new name, perhaps shift the names of the principals, and start all over again two blocks down the street.

Senator BURDICK. They have to use public services and business to conduct business.

Mr. FEIGIN. That is true. They use WATTS lines and telephone lines to urge people to wire their money to their banking house. As soon as they start, the money flows in. They shut down, and they move down to a new address. Some of them operate in far more blatant disregard of the law because the law is ambiguous. It is very hard to discern whether it is regulated activity or illegal activity, and proof required to establish fraud takes months, if not years, to develop.

Several years ago, in 1984 or 1983, a nationally advertised company, called International Gold Bullion Exchange, in Fort Lauderdale, run by two brothers, advertised gold for low stock. The only thing you had to do was to agree not to have them buy it right away. They would buy within 90 days or something like that.

They advertised in the Wall Street Journal for several months. When the authorities finally broke in, or entered the vault, they found bars of wood painted gold, and a Playboy magazine. As a result, the bankruptcy trustees had over 20,000 people who lost in excess of $75 million. It was clearly evident to anyone who picked up a newspaper that something was going on.

The Permanent Subcommittee on Investigations of the Senate conducted extensive hearings, but nothing really came of it, although the testimony was powerful.

Senator BURDICK. How is it in terms of the CFTC checking the existence of these illegal trade exchanges?

Mr. FEIGIN. I think that the Model State Commodity Code, in the wake of the adoption of section 1280, has given us at least the ability to proceed. Much of the seeds of the problem were sewn when the states were preempted from regulating the commodities in 1974.

To a large extent, as far as the fraudulent side of things, that problem has been eradicated by the adoption of section 1280. The states are now proceeding to adopt the Model State Commodity Code. At the end of this year, we expect 13 states to have adopted their own commodity legislation, and this will help.

The CFTC has perhaps 500 people, about 125 of them are doing the enforcement. They are basically charged with regulating the exchanges. It is very hard to ask 125 people spread across the country to regulate both commodities and commodity exchange fraud.

It is a criminal problem. I think that the task force of the Justice Department, which has not really dealt with commodity fraud, but has dealt with other types of fraud, was a shot in the arm. The CFTC needs people to really approach the problems, and the states really need that criminal ability as well.

The lesson can be drawn from Florida. They went from a staff of, I believe, 18 to a staff of 56 employees to their division to drastically uphold their law to attack the problem. I think that they need people, and they need criminal authority.

Senator BURDICK. Thank you very much.

Mr. FEIGIN. Thank you.

[The statement follows:]

STATEMENT OF PHILIP A. FEIGIN

Mr. Chairman, members of the Subcommittee, thank you for allowing me to appear before you today. My name is Philip A. Feigin. I am the Assistant Securities Commissioner for the Colorado Division of Securities, serve as a member of the Advisory Committee on State/CFTC Cooperation, and as Chairman of the Commodities Committee of the North American Securities Administrators Association, Inc. ("NASAA"). NASAA is a non-profit corporation composed of the securities administrators of the fifty states, the District of Columbia, the Canadian provinces, Mexico and Puerto Rico. As an organization, NASAA is committed to investor and consumer protection. I am here today to speak in support of the Commodity Futures Trading Commission and the proposed appropriation for the Commission in the next fiscal year.

The level of cooperation between the states and the CFTC is at an all time high. Our concerted efforts in the interests of investor and consumer protection should serve as a model of cooperation for other state and federal agencies.

To begin, the CFTC and the states continue to conduct joint investigations and to bring joint enforcement actions around the country. As experience grows, the states are more able to shoulder their fair burden in the fight against commodities fraud.

In addition, the CFTC willingly provides advice, testimony, interpretive assistance, enforcement data, liaison with foreign jurisdictions and other technical help to the states. The Enforcement Division continues to conduct training seminars for state employees on an annual basis, and has conducted specific training programs in particular jurisdictions on request.

The Commission has devoted significant resources, time and effort to the adoption by the states of the Model State Commodity Code. The Code represents a rare if not unprecedented example of cooperation between federal, state and self-regulatory agencies and industry in developing and promoting consumer protection legislation. Chairman Phillips, Commissioner West and the CFTC's General Counsel's office are to be commended for their support and efforts regarding the Code.

The Advisory Committee on State/CFTC Cooperation is another example of the extent to which state involvement is sought by the Commission. In an area as complex as the futures industry, it is all too easy to become preoccupied with the likes of audit trails, triple witching hours, stock index futures and similar esoterica, at the expense of the "man-on-the-street" consumer. The Advisory Committee provides a public forum for addressing those perhaps more pedestrian but not less important concerns.

State/CFTC cooperation is excellent, and certainly it must be so, because our current tasks seem almost impossible and the future looms even more ominous. One need only pick up a newspaper to find evidence of serious threats to the sanctity and reliability of our financial markets. The credibility of our market participants is slipping daily. At the same time, the pressures to expand products and to expand and legitimate so-called off-exchange products is mounting. Unless action is taken to curb it, leverage will likely expand in the next few years. Currency "forward" contracts have gained visibility. Price sensitive investments are being created faster than they can be categorized. Banks are making loans to investors to purchase precious metals under arrangements which startling resemble leverage and futures contracts. And there are an estimated 200 active boiler rooms in Southern California alone selling off-exchange instruments in blatant violation of the law, but there are not enough resources to stop them.

In summary, the CFTC's work has been commendable. Their relationship with state authorities is a model for state-federal cooperation. The Commission faces some of its most important challenges in the year to come. Appropriate resources are essential so that they may meet those challenges. We urge you to approve the proposed CFTC appropriation. Thank you.

UNITED FRESH FRUIT AND VEGETABLE ASSOCIATION

STATEMENT OF ROBERT KEENEY, VICE PRESIDENT, GOVERNMENT RELATIONS

Senator BURDICK. Our next witness is Mr. Robert C. Keeney, vice president of government relations for the United Fresh Fruit and Vegetable Association.

Mr. KEENEY. Thank you, Mr. Chairman.

I am Robert Keeney, vice president for government relations of the United Fresh Fruit and Vegetable Association, the national trade association representing the fresh produce industry.

Over the past few years, there has been a very important effort on the part of the Congress and the administration to control spending to reduce the federal deficit. United, of course, supports these efforts. However, United firmly believes that the time is fast approaching when no additional spending restrictions can be made for certain agricultural programs without endangering American agriculture.

The administration has proposed the elimination of funding for the IR–4 Pesticide Clearance Program under special grants of the Department's Cooperative State Research Service.

Without the IR–4 program, the fresh produce industry will be faced with a declining number of available pesticides. For fiscal year 1988, United requests an appropriation of over $1.8 million to carry out this program.

The Foreign Agricultural Service provides vital support for U.S. agricultural export activities, working closely with industry to increase exports. United is seeking an increase of $14.8 million over fiscal year 1987 funding, providing funds for additional FAS personnel, exchange rate offset, and to return the funding for the Export Market Development Program to its fiscal year 1986 funding level.

United greatly appreciates the support this committee has given to the Central American Medfly Eradication Program in the past. CAPMED would eliminate the destructive Medfly from Central America, providing needed insurance against infestations in the United States.

The Food and Agriculture Organization has indicated that they expect international donations to be about 50 for the program. An additional $7.5 million above the administration's request is needed for start-up funding for the CAPMED Program.

There is a great need to have the agricultural research expertise on-site in Japan to address the problems involving U.S. agricultural export to the Far East, including product condition, market quality, and insect infestation issues. United requests that report language be inserted in the ARS appropriation requiring this agency to establish a presence in the Far East to deal with quality and quarantine problems. Specific language is submitted in our written testimony.

United supports the efforts to begin eradication of Hawaii's fruit fly infestation on the Island of Kauai. The presence of fruit fly pests in

Hawaii continually threatens agriculture throughout the United States. In addition, eradication of the trifly complex from Hawaii would boost this state's agricultural production and exports. An appropriation of $700,000 in fiscal year 1988 is necessary to commence this initiative.

The Beltsville Agricultural Research Center is one of the most important ARS research facilities, but currently is in desperate need of upgrading and modernization. United requests that the subcommittee appropriate $20 million to ARS to begin the restoration of this facility.

The administration has recommended that the fiscal year 1988 budget for the Office of Transportation, U.S. Department of Agriculture, be cut in half, to $1.2 million, and that the office be phased out by 1989. The activities of the OT have provided the perishable commodity industry with the technical information needed to transport produce under optimum conditions insuring quality produce for consumers. We urge the Congress to fund OT at the $2.4 million level budgeted in fiscal year 1987.

In December 1986, the General Accounting Office released two studies concluding that FDA needed to improve its import and domestic food inspection activities. United fully supports efforts to upgrade FDA's inspection activities to ensure that the American consumer buys safe food.

To adequately improve the efficiency of FDA import and domestic food inspections, a $5 to $7 million appropriation for fiscal year 1988 would be appropriate.

It is unusual for the fresh fruit and vegetable industry to have such a lengthy list of appropriation requests. However, if this industry is to remain competitive on the world market, and continue to provide wholesome, safe and reasonably priced food to the American consumer, continued and expanded support from the U.S. Department of Agriculture and the U.S. Food and Drug Administration is greatly needed.

Thank you, Mr. Chairman, I will be happy to answer any questions you may have.

Senator BURDICK. Thank you very much.

You are requesting a large increase for the Foreign Agricultural Service of almost $15 million.

Mr. KEENEY. The Foreign Agricultural Service, of course, is very important. All of their activities are very important to the fresh produce industry. The cooperative program and the market development activities are important to our members and others in the industry. We will leave the determination of the appropriate amount of funding to Congress.

There are problems that exist right today with FAS. Because of the exchange rate, some of the funding that was requested and given by Congress over the year has been reduced, and this will just cover some of the funding for those activities.

Senator BURDICK. You request funding for an ARS research facility in Japan.

Mr. KEENEY. The reason that we are suggesting Japan is because of the central location and transportation facilities. Certainly, other parts of the Far East, including Singapore, Hong Kong, and Taiwan are very important to this industry, and those markets have increased dramatically over the last few years. It could be located in another part of the Far East.

Senator BURDICK. You request funding for the Hawaii Trifly Eradication Program.

Mr. KEENEY. The Hawaii program, it would be just the beginning of the program, the feasibility study, we understand, at this point, to take a look at what they can do to eradicate the trifly in Hawaii. It is going to be a very long and extended program, of course, because the state is infested with a number of fruit flies.

Senator BURDICK. Thank you very much.

[The statement follows:]

STATEMENT OF ROBERT C. KEENEY

Good afternoon, Mr. Chairman and members of the Subcommittee. I am Robert C. Keeney, Vice President, Government Relations of the United Fresh Fruit and Vegetable Association. United is the national trade association representing the fresh produce industry. Our 2,500 member companies handle 80 percent of the fresh fruits, vegetables and nuts commercially marketed in the United States.

In summary, United request that the Subcommittee support the following proposals: 1) Cooperative State Research Service - Special Grants: IR-4 Pesticide Clearance Program: $1.869 million; 2) Foreign Agricultural Service: $14.8 million above FY 1987 funding; 3) Animal and Plant Health Inspection Service - Medfly: $7.5 million above Administration's request; 4) Agricultural Research Service: Report language for Japan research facility; $700,000 for Hawaii trifly eradication; $20 million for Beltsville Agricultural Research Center; 5) Office of Transportation: $2.4 million total for FY 1988; and 6) U.S. Food and Drug Administration - Food Import and Domestic Inspections: $5-7 million above FY 1987 level.

Over the past few years, there has been a very important effort on the part of Congress and the Administration to control federal spending and improve the federal deficit. United supports these efforts. However, there comes a time when cuts and spending restrictions cannot be made without causing harm to essential programs. United firmly believes that the time is fast approaching where no more cuts or spending restrictions can be made for certain agriculture and programs without endangering American agriculture.

United strongly urges the Committee to support funding for the following programs at the highest possible level.

U.S. DEPARTMENT OF AGRICULTURE

Cooperative State Research Service

The Administration has proposed the elimination of funding for the IR-4 pesticide clearance program under special grants of the CSRS. Due to great expense, chemical companies often do not register chemicals for use on minor crops which include all produce commodities. IR-4 provides grants in cooperation with industry and State Agricultural Experiment Stations to conduct the necessary support data to register minor use chemicals. Without this support, the fresh fruit and vegetable industry would be faced with a declining number of available pesticides. This is increasingly serious because of the Environmental Protection Agency's improved special review process which is questioning the safety of many pesticides important to the produce industry.

For FY 1988, United requests an appropriation of $1.869 million, which is $500,000 greater than FY 1987. This increase is to cover an expected 50 percent increase in requests for the IR-4 program to conduct studies required for minor use pesticide clearances.

Foreign Agricultural Service

FAS provides vital support for U.S. agricultural export activities working closely with industry to increase exports. The Administration has proposed a slight increase over FY 1987 of $3.4 million to cover additional retirement costs and to offset higher operating costs overseas.

United is seeking an increase of $14.8 million over FY 1987 providing funds for additional FAS personnel (to handle additional legislated responsibilities), dollar devaluation offset, and to return the funding for the Export Market Development Program (i.e. Cooperator Program) to its FY 1986 funding level. Of the $14.8 million increase, $9.1 million would be for the Cooperator program. To maintain overseas markets, FAS must be able to provide financial support to insure continuous marketing.

Animal and Plant Health Inspection Service

In the FY 1987 appropriations Congress urged APHIS to continue its work on the Central American Medfly Eradication Program (CAPMED) within available funds. United greatly appreciates the support this Committee has given the CAPMED program in the past. Medfly eradication provides additional needed insurance against infestations in the United States. In 1980-1981, $300 million was spent on eradicating medfly from California and lost production. If Congress is unable to appropriate new funds for FY 1988, however, FAO and Guatemala, the two key international supporters, may withdraw from the program. FAO has made significant strides to obtain international funding. Whereas last year FAO was unwilling to commit to any specific amounts of international funds, FAO has now indicated they will obtain resources for 50 percent of the program. However, FAO has also indicated, that if the United States is unwilling to provide its half of the funding as the major beneficiary of the program, FAO sees little reason to continue its efforts. In addition, Guatemala may pull out of the program if they do not receive any benefits, i.e. eradication of medfly quickly and efficiently from their country.

An additional $7.5 million above the Administration's request is needed for start up funding for the CAPMED program. Although it would be preferable to have the full funding under the U.S.D.A.'s budget, consideration may be given to split the funding between U.S.D.A. and the Agency for International Development.

Agricutural Research Service

A. ARS JAPAN RESEARCH FACILITY: There is a great need to have agricultural research expertise on-site in Japan to address problems involving U.S. agricultural exports, including product condition, market quality and insect infestation issues, in the Far East. Although FAS made a request to the State Department concerning the assignment of additional agriculture officials in Japan, the State Department denied the request "for security reasons."

United requests that the following report language be inserted in the ARS appropriations requiring ARS to establish a presence in the Far East, preferably Japan, to deal with quality and quarantine problems.

"To assist in reducing non-tariff trade barriers and improving the quality of U.S. agriculture exports to the Far East, American technical assistance is needed to examine the effects of quarantine treatments and market quality after shipment. Working with officials of the importing countries, American researchers can assist in resolving legitimate concerns of the importing countries and American exporters on product condition, market quality and insect infestation issues as witnessed by the success of the ARS Rotterdam facility.

The Congress, therefore, directs the Agricultural Research Service to establish a research presence in Japan by April 1, 1988, within currently available funds.

B. HAWAII TRIFLY ERADICATION: United supports the efforts to begin eradication of Hawaii's fruit fly infestation on the Island of Kauai. If successful, the large scale experiment on Kauai offers the potential to extend this program to the remainder of the state.

The elimination of the trifly complex from Hawaii is important to the Association' members and to all of U.S. agriculture. The presence of fruit fly pests in Hawaii continually threatens agriculture throughout the southern agricultural belt from California to Florida. In these states, the farm value of host fruits and vegetables amounts to many billions of dollars. In addition, eradication of the trifly complex from Hawaii would boost Hawaii's agricultural production and exports.

The 1980-1981 medfly infestation in California cost the federal and state governments and California agriculture $300 million. The University of California at Davis has determined that if the 1980-1981 medfly infestation had not been eradicated, the annual crop losses and increased production and handling costs could have been as high as $900 million. In light of these costs, the investment in a Hawaii fruit fly eradication program would be money well spent.

Both the Agriculture Research Service and the Animal and Plant Health Inspection Service have testified that eradication of the trifly complex from Hawaii is a goal worth achieving and that the technology is available to safely and effectively achieve this goal. An appropriation of $700,000 in FY 1988 is necessary to commence this initiative. United adds its name to the list of those who endorse this program.

C. BELTSVILLE AGRICULTURAL RESEARCH CENTER (BARC): BARC is one of the most important ARS research facilities, but currently is in desperate need of upgrading and modernization.

United requests that the subcommittee appropriate $20 million to ARS to begin the restoration of the BARC facility to include refitting water pipes, renovating heating, air conditioning, electrical work, and laboratories, and purchasing new and needed research instruments and equipment. Of particular interest to the Association would be funds to improve the Product Quality and Exports Laboratory ($2.4 million) and the Pest Quarantine Facility ($2.475 million).

Office of Transportation

The Administration has recommended that the fiscal year 1988 budget for the Office of Transportation, U.S. Department of Agriculture, be cut in half to $1.2 million, and that the office be phased out by 1989. The activities of the OT as authorized by the Agriculture Marketing Act, the Agriculture Adjustment Act, and the Rural Development Act are extremely important to the fresh produce industry. These activities have provided the perishable commodity industry with the technical information needed to transport produce under optimum conditions insuring quality produce for consumers. We urge Congress to fund OT at the $2.4 million level budgeted in fiscal year 1987.

If Congress decides that OT should be abolished by 1989, we strongly urge that the necessary funds be appropriated so that the current programs of that office may be transfered within the Department.

U.S. FOOD AND DRUG ADMINISTRATION

In December 1986, the General Accounting Office released two studies concluding that FDA needed to improve its import and domestic food inspection activities. United fully supports efforts to upgrade FDA's inspection activities to ensure the American consumer buys safe foods.

To adequately improve the efficiency of FDA import and domestic food inspections, a $5 million - $7 million appropriatons for FY 1988 would be appropriate.

It is unusual for the fresh fruit and vegetable industry to have such a lengthy list of appropriations requests. However, if this industry is to remain competitive on the world market, and continue to provide wholesome, safe and reasonably priced food to the American consumer, continued and expanded support from the U.S. Department of Agriculture and the U.S. Food and Drug Administration is greatly needed.

Thank you for your consideration. I would be happy to answer any questions you may have at this time.

NATURAL RESOURCES DEFENSE COUNCIL

STATEMENT OF DAVID WIRTH, SENIOR PROJECT ATTORNEY

Senator BURDICK. Our next witness will be Mr. David Wirth, senior project attorney for the Natural Resources Defense Council.

Mr. WIRTH. Thank you, Mr. Chairman.

After hearing several of the other witnesses today, I think that I may be one of the few who can tell this committee to save some money rather than to spend it.

My name is David Wirth, and I am here representing the Natural Resources Defense Council, which is an environmental organization. I am also testifying today on behalf of the Sierra Club.

I would like to discuss two projects that have already been discussed by another witness, to eradicate the Mediterranean fruit fly from Central America. One MOSCAMED, which applies to Guatemala, and the other is the CAPMED which applies to all of Central America.

As a result of extensive investigations into these projects, including a Freedom of Information Act request and personal discussions with APHIS officials, we have concluded that it would be premature for preparation for these projects to continue before adequate environmental reviews are prepared.

MOSCAMED, the Guatemala project, appears to be the more likely to be implemented in the near future. However, so far as we have been able to determine there is no urgent necessity to get on with either project.

Medfly has already been eradicated from Mexico, and APHIS is already maintaining what they call a barrier in Guatemala to prevent reinfestation. By all accounts, infestation of the continental United States is more than 10 times as likely from Hawaii as from all of Central America put together. Not surprisingly, when we asked APHIS officials about the urgency of the situation, they were totally unable to respond.

At the same time, the service is proceeding with preparation for these two projects, which involve extensive use of malathion, which is a broad spectrum pesticide that has adverse impact on many other species besides the Medfly, and ethylene dibromide, EDB, a carcinogen which has been banned for use in this country.

The previous witness, Mr. Chairman, referred to these projects as an insurance policy for the United States, but I would submit that they are very expensive and unnecessary insurance policies. As a matter of public policy, we should not be going out and buying insurance policies that are not necessary.

Mr. Chairman, last year, this subcommittee instructed APHIS to move ahead with preparation for these projects, providing that it could be done within existing resources. NRDC and the Sierra Club, however, believe that in light of the very disturbing information that we have learned about these projects over the last several months even that action was premature.

We hope that this year the subcommittee will insist that no further money be spent on preparation for these projects until full environmental reviews have been prepared. Let me summarize briefly the type of information that we have managed to produce.

First, APHIS and the Agency for International Development are currently engaged in preparing an environmental assessment of the MOSCAMED project, that is the Guatemala project. But we have gotten documents from APHIS that show that APHIS is already considering applying a no-significant-impact policy with respect to the MOSCAMED project that would prematurely curtail the environmental assessment process. So it is quite obvious that that type of action would render the entire process meaningless.

Second, according to the Department of Agriculture cable that is attached to my prepared statement, APHIS has already pressured the government of Guatemala, on at least one occasion, to proceed with the use of EDB and malathion, despite the fact that these pesticides could have adverse impacts in Guatemala, and despite the government of Guatemala's reservations about it. Needless to say, if the U.S. government pressures these other governments into these projects, there could be severe adverse diplomatic repercussions for the United States.

Third, APHIS's own documents state that CAPMED, which is the large multilateral project, which would be funded by several donors, will not be cost effective and would be a waste of the taxpayers' money even under the most optimistic assumptions. Mr. Chairman, I think that the subcommittee should look very closely at the cost effectiveness of this large multilateral project.

Fourth, the World Bank, which in recent years has not been known for the fastidiousness of its environmental practices, rejected the request from the Food and Agriculture Organization to play a major role in preparation for CAPMED. We think that this is indicative of the type of concerns that this subcommittee should have about the environmental consequences of these projects.

Fifth, and last, there is no reason that CAPMED, again, the large multilateral project, could possibly be effective, given the current political situation in Nicaragua. When we asked APHIS officials about this point, significantly, they had no response.

In short, Mr. Chairman, NRDC and the Sierra Club sincerely hope that this subcommittee will take decisive action to prohibit further preparations for these harmful and wasteful projects until full environmental reviews are complete.

Thank you, and I will be glad to answer any questions that you may have.

Senator BURDICK. The problem is that the Medfly infestation is terribly costly.

Mr. WIRTH. Mr. Chairman, we are not suggesting that these projects should never go forward. What we are saying is that we believe, based upon the evidence that we have managed to get from APHIS, or that APHIS has managed to present to this committee, there is no urgent necessity here to proceed with these very expensive and at this time unnecessary projects.

What we are asking is that there be full environmental reviews of these projects before they go forward. I think that this is the important thing for the subcommittee to keep in mind.

We are totally aware that there is some risk of infestation in the United States, but at the current time it doesn't appear to be an urgent situation. For one thing, if there is to be an infestation, it is much more likely to come from Hawaii than from Central America.

Senator BURDICK. It is my information that we are maintaining a barrier to prevent a Medfly infestation in this country.

Mr. WIRTH. Mr. Chairman, we are aware that that barrier is being maintained in Central America to prevent further infestation of Medfly in Mexico now, and that is not the subject of my testimony.

We have no objection to that for the time being, for that program to continue. But what we are talking about is an expansion of that program to Guatemala, which is the MOSCAMED Program, and to Central America generally. Until the existing program of maintaining the barrier between Guatemala and Mexico has not been shown to be effective, we think that these projects should not go forward.

Senator BURDICK. Thank you.

Mr. WIRTH. Thank you.

[The statement follows:]

STATEMENT OF DAVID A. WIRTH

Mr. Chairman, I am David A. Wirth, Senior Project Attorney with the Natural Resources Defense Council (NRDC). I am testifying today on behalf of NRDC and the Sierra Club, two national nonprofit environmental organizations with a total of nearly 400,000 members distributed through every state. I am here to discuss severe environmental defects in two proposed projects of the Department of Agriculture's Animal and Plant Health Inspection Service (APHIS).

The two projects are MOSCAMED, a plan to eliminate the Mediterranean fruitfly from Guatemala, and CAPMED, a similar plan for all of Central America. Both projects would involve the widespread and indiscriminate use of the pesticides malathion and ethylene dibromide (EDB). The environmental risks of the projects, which are undoubtedly substantial, have not yet been adequately addressed. Alternatives have not been considered. It is highly questionable whether the projects promise significant benefits either to Central America or the United States. We strongly urge this Subcommittee not to appropriate any funds for these projects for the coming fiscal year and to prohibit preparations for the projects from going forward until adequate environmental reviews have been completed.

MOSCAMED

Medfly has already been eradicated from Mexico using United States funds, and APHIS is maintaining a "barrier" in Guatemala to prevent reinfestation. The next phase of MOSCAMED would extend eradication efforts to other areas of Guatemala using local currency from the P.L. 480 "Food for Peace" program, which the Department of Agriculture administers jointly with the Agency for International Development (A.I.D.). The project as currently envisioned would cost $29.7 million over a 4-year period and would involve extensive reliance on the pesticides malathion and ethylene dibromide (EDB).

Malathion is a broad-spectrum pesticide which could have adverse effects on honeybees, fish, and shellfish of commercial importance. It could also harm other potentially beneficial insect species and could substantially reduce biodiversity in the area. EDB is a potent cancer-causing agent that has been banned for domestic use in the United States.

Using these pesticides to combat the relatively small risk of infestation in the United States by medfly from Central America is comparable to using an atomic bomb to demolish a building. Through the Freedom of Information Act, we have obtained a USDA telegram (Attachment A) that demonstrates that the government of Guatemala has at least once suspended existing pesticide spraying and treatment programs because of compelling public health and environmental concerns about malathion and EDB. Moreover, the severe potential adverse effects of the program are likely to be totally disproportionate to the minimal benefits. Indeed, APHIS's 1985 "Technical Report" submitted to this Subcommittee recognized that the risk of a U.S. infestation from all of Central America is currently less than one-tenth that posed by produce imported from Hawaii. This Subcommittee should assure that all concerns about the health and environmental effects of these pesticides are resolved before additional preparations for the project take place.

As required by its regulations, A.I.D. has recently begun preparation of an environmental assessment for MOSCAMED. NRDC and the Sierra Club will participate in that process by commenting on A.I.D.'s recently-released "scoping" document.

However, it is already apparent from that document that the environmental review process has gone off track.

A.I.D.'s regulations require that an environmental assessment must "explore and evaluate reasonable alternatives" to a proposed project such as MOSCAMED. The scoping document, however, considers only the proposed MOSCAMED project and a "no-action" alternative of no program to combat medfly infestations whatsoever. No other nonpesticide alternatives are mentioned. Moreover, through the Freedom of Information Act, NRDC received documents that show that APHIS had considered a conclusion that MOSCAMED will have no adverse environmental impacts, which clearly would prejudge the outcome of the environmental review process whose conclusion is at least six months in the future. It is plain that, if the environmental assessment proceeds as set out in the scoping document, it will give a highly biased picture of alternatives to the MOSCAMED project and will be fatally flawed when measured against the relevant regulatory requirements. This Subcommittee should intervene now to assure that preparations for MOSCAMED do not go forward until an adequate environmental assessment has been completed.

CAPMED

CAPMED would push the barrier currently in Guatemala to the Darien Gap in Panama at an estimated cost of $350 million over a 9-year period. Although other countries may contribute to the project, with the UN Food and Agriculture Organization playing a coordinating role, most of CAPMED's cost -- up to 70% by some estimates -- would have to be borne by the United States. CAPMED would involve the incredible sum of $173.2 million for malathion and EDB.

In a 1985 "Technical Report" submitted to this Subcommittee, APHIS prepared a cost-benefit analysis which concluded that "[b]enefits under the most optimistic assumptions do not outweigh costs." If anything, that analysis understated the costs to the American taxpayer of this overblown, grandiose, and unnecessary project and overemphasized the prospects for an even minimally effective eradication program.

In analyzing the cost effectiveness of the project, APHIS included both the reduction of the risk of reinfestation from Central America to the United States and supposed gains to Central American countries as potential benefits. With respect to benefits in the United States, APHIS had to increase the risk of infestation from Central America to more than four times its generally accepted value and double the risk of infestation to the United States from all sources before CAPMED began to appear cost-effective. As to the presumed benefits to the economies of Central America, an A.I.D. study, obtained by NRDC through its Freedom of Information Act request, concluded:

> It is noteworthy, that total eradication of the medfly would have little or no relevance to the current problems with the export of fruits and vegetables into the U.S. There are reportedly up to 14 other fly species of potential U.S. regulatory concern, which would occupy the ecological niche currently held by the medfly, if eradication were to be successful. Thus, the real economic advantage of such a program to individual Central American countries is subject to question. This, coupled with widespread broadcast of broad spectrum pesticides over forested areas, makes the subject one of more than fleeting interest.

Among the numerous practical impediments to effective implementation of CAPMED, the most obvious is the current political situation concerning Nicaragua. It will most likely be extremely difficult for the United States government to convince the government of Nicaragua to participate in this program -- especially when most of the benefits of the project will accrue to United States interests. At the same time, the participation of Nicaragua, by virtue of its geographical location, would be critical to the success of CAPMED. When asked about this point in a recent meeting with NRDC, APHIS officials had no response.

With all these drawbacks, it is not surprising that the World Bank in September 1986 rejected a request to play a key role in implementing CAPMED. The World Bank's letter (Attachment B) specifically cited environmental concerns as one of the reasons for not taking on the project.

APHIS's Technical Report completely ignored any possible harm to the environment and did not include environmental effects as a cost of the project. To our knowledge, no agency of the U.S. government and no international organization has yet undertaken an environmental analysis of CAPMED. In view of the profound environmental consequences of this costly massive program, it is only prudent for this Subcommittee to insist that such a review take place before further preparations proceed.

CONCLUSION

In acting on APHIS's appropriation for fiscal year 1987, this Subcommittee encouraged the Service to proceed with preparations for MOSCAMED and CAPMED within existing funds and supported the APHIS's attempts to enlist other donors in these enterprises. In light of the events of the past year and newly developed information described above, NRDC and the Sierra Club are convinced that this action was premature. We believe that these projects could never be justified within U.S. borders. Indeed, a similar proposal to eradicate medfly from Hawaii was jettisoned for environmental reasons. Moreover, these projects are plainly a waste of taxpayers' money at a time when fiscal responsibility is a high priority.

For these reasons, this Subcommittee should

- prohibit the use of any APHIS funds for further preparation or implementation of either CAPMED or MOSCAMED until environmental assessments in conformity with A.I.D.'s requirements have been completed and submitted to this Subcommittee for consideration; and
- prohibit the use of APHIS-administered funds to support, either directly or indirectly, any program that involves the use of EDB.

Mr. Chairman, this concludes my prepared statement. I will be pleased to answer any questions you may have.

[ATTACHMENT A]

USDA TELEGRAM

SUBJECT: MEDFLY PROGRAM IN GUATEMALA

PLEASE DELIVER THE FOLLOWING MESSAGE FROM ME TO THE GUATEMALAN MINISTER OF AGRICULTURE:
"THE DEPARMENT IS VERY APPRECIATIVE OF GUATEMALA'S ACTIVE PARTICIPATION AND COOPERATION WITH USDA ON THE MEDFLY QUARANTINE AND ERADICATION PROGRAM FOR GUATEMALA. I WANT TO FORMALLY EXPRESS MY THANKS FOR YOUR ACTIVE INVOLVEMENT AND SOLICIT YOUR CONTINUED PARTICIPATION OF THIS IMPORTANT PROGRAM. HOWEVER, ACTION TAKEN TO STOP AERIAL SPRAY APPLICATIONS AND THE TO BAN EDB TREATMENT OF HOST FRUITS ENDANGERS THE EFFECTIVENESS OF THE MEDLY QUARANTINE AND ERADICATION PROGRAM AND THREATENS WHAT IS A SUCCESSFUL MODEL OF COOPERATIVE INTERNATIONAL PLANT PROTECTION. THE PESTICIDE BAIT MIXTURES APPLIED BY AIRCRAFT HAVE BEEN USED EXTENSIVELY IN GUATEMALA, MEXICO AND THE UNITED STATES AND HAVE PROVEN TO HAVE NEGLIGIBLE IMPACT ON BEES AND BENEFICIAL INSECTS, AND THE ENVIRONMENT. THE MINIMAL USE OF EDB OVER THE 2- TO 3-YEAR PERIOD NEEDED TO COMPLETE ERADICATION IN GUATEMALA IS INSIGNIFICANT IN THE FOOD CHAIN WHEN COMPARED WITH THE LARGE QUANTITIES OF POTENTIALLY MORE DANGEROUS CHEMICALS USED ON COFFEE. THE CONTROVERSIAL BAN ON EDB BY THE EPA HAS NOT BEEN GENERALLY ACCEPTED BY OTHER COUNTRIES OF THE WORLD AND IN ADDITION ACCEPTABLE SUBSTITUTES HAVE NOT BEEN DEVELOPED."

THE INFRASTRUCTURE TO SUPPORT THE MEDFLY ERADICATION PROGRAM CONSISTS OF OVER FIVE HUNDRED EMPLOYEES, A REARING FACILITY IN SAN MIGUEL, PETAPE, CAPABLE OF PRODUCNG UP TO 150 MILLION STERILE FLIES PER WEEK, A TRAPPING SYSTEM OF 20 THOUSAND TRAPS THROUGHOUT THE COUNTRY, AN INFORMATION PROGRAM AND A HIGHLY QUALIFIED TECHNICAL CADRE. THIS PROGRAM IS SUPPORTED BY OVER $4 MILLION (U.S.) ANNUALLY FROM THE UNITED STATES AND MEXICO AND AN EXTENSIVE INVESTMENT IN LAND, BUILDINGS, AND PEOPLE BY GUATEMALA. IN ADDITION, GUATEMALA HAS INDICATED FUNDING LEVEL OF $3 MILLION FOR 1985 FROM PL-480 FUNDS. THIS $7 MILLION FUNDING LEVEL WILL PERMIT AN INCREASE IN PROGRAM ACTION AND THE CONTINUED MOVEMENT OF MEDFLY SOUTHWARD.

GUATEMALA WILL BENEFIT FROM MEDFLY ERADICATION AS FOLLOWS:

1. ADDITIONAL AGRICULTURAL PRODUCTS WOULD BE ELIGIBLE FOR EXPORT TO THE UNITED STATES AND WOULD BE ELIGIBLE FOR SPECIAL CONSIDERATION UNDER THE CARIBBEAN BASIN INITIATIVE.

2. WOULD PERMIT A DIVERSIFICATION IN AGRICULTURE.

3. MONIES SPENT DURING ERADICATION WOULD BENEFIT THE GUATEMALAN ECONOMY.

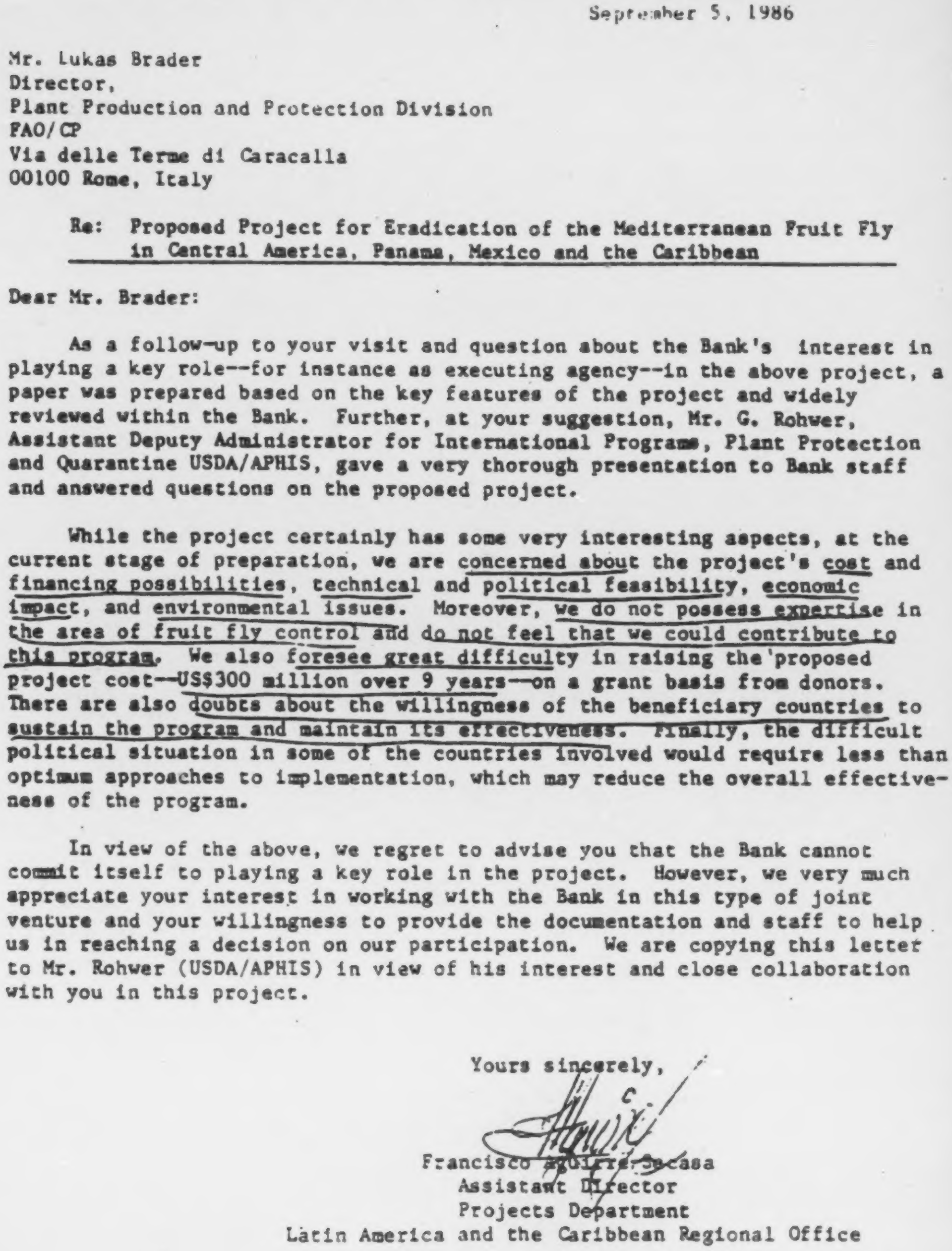
4. THE PROGRAM IN GUATEMALA WOULD BECOME A HIGHLY VISABLE MODEL FOR CONTINUING ERADICATION EFFORTS IN CENTRAL AMERICA.

5. AFTER ERADICATION OF MEDFLY, THE HIGHLY SKILLED TECHNICIANS AND EXISTING INFRASTRUCTURES COULD THEN USE THEIR EXPERTISE ON OTHER AGRICULTURAL PROBLEMS IN GUATEMALA.

"THE U.S. DEPARTMENT OF AGRICULTURE'S EXPERIENCE WITH LARGE-SCALE SPRAY PROGRAMS INDICATE THAT FARMERS, BEEKEEPERS, AND RANCHERS MUST BE INCLUDED AS INVOLVED PARTICIPANTS IN OVERALL AGRICULTURAL NEEDS OF THE COUNTRY AND NOT JUST IN THEIR LIMITED AREA OF INTEREST FOR THEY WILL BE THE LONG-TERM BENEFACTORS OF SUCH PROGRAMS. TO ASSURE CONTINUED U.S. FUNDING OF THIS HIGHLY VISABLE AND SUCCESSFUL PROGRAM, YOUR CONSIDERATION OF THE NEED FOR CONTINUED USE OF EDB AS A QUARANTINE TREATMENT AND A REASONABLE POLICY CONCERNING THE NECESSARY USE OF MALATHION BAIT SPRAY APPLICATION IS REQUESTED."
BT

[ATTACHMENT B]

LETTER FROM FRANCISCO AGUIRRE SACASA, ASSISTANT DIRECTOR, PROJECTS DEPARTMENT, LATIN AMERICA AND THE CARIBBEAN REGIONAL OFFICE, THE WORLD BANK



September 5, 1986

Mr. Lukas Brader
Director,
Plant Production and Protection Division
FAO/CP
Via delle Terme di Caracalla
00100 Rome, Italy

Re: Proposed Project for Eradication of the Mediterranean Fruit Fly in Central America, Panama, Mexico and the Caribbean

Dear Mr. Brader:

As a follow-up to your visit and question about the Bank's interest in playing a key role--for instance as executing agency--in the above project, a paper was prepared based on the key features of the project and widely reviewed within the Bank. Further, at your suggestion, Mr. G. Rohwer, Assistant Deputy Administrator for International Programs, Plant Protection and Quarantine USDA/APHIS, gave a very thorough presentation to Bank staff and answered questions on the proposed project.

While the project certainly has some very interesting aspects, at the current stage of preparation, we are concerned about the project's cost and financing possibilities, technical and political feasibility, economic impact, and environmental issues. Moreover, we do not possess expertise in the area of fruit fly control and do not feel that we could contribute to this program. We also foresee great difficulty in raising the proposed project cost--US$300 million over 9 years--on a grant basis from donors. There are also doubts about the willingness of the beneficiary countries to sustain the program and maintain its effectiveness. Finally, the difficult political situation in some of the countries involved would require less than optimum approaches to implementation, which may reduce the overall effectiveness of the program.

In view of the above, we regret to advise you that the Bank cannot commit itself to playing a key role in the project. However, we very much appreciate your interest in working with the Bank in this type of joint venture and your willingness to provide the documentation and staff to help us in reaching a decision on our participation. We are copying this letter to Mr. Rohwer (USDA/APHIS) in view of his interest and close collaboration with you in this project.

Yours sincerely,

Francisco Aguirre Sacasa
Assistant Director
Projects Department
Latin America and the Caribbean Regional Office

CENTER ON BUDGET AND POLICY PRIORITIES

STATEMENT OF ROBERT GREENSTEIN, EXECUTIVE DIRECTOR

Senator BURDICK. Mr. Robert Greenstein, executive director of the Center on Budget and Policy Priorities.

Mr. GREENSTEIN. Thank you, Mr. Chairman. I appreciate the opportunity to appear here today. I am Robert Greenstein, director of the Center on Budget and Policy Priorities, a nonprofit research and analysis organization that focuses on federal budget and policy issues affecting low-income Americans.

I would like to discuss today two issues relating to the budget for the Food and Nutrition Service, an area that has long been an interest of mine. In 1979 and 1980, I served as Administrator of FNS, and prior to that as Special Assistant to Secretary Bob Bergland.

I would like to talk first about the WIC Program. I think there is little doubt that the WIC Program, which provides food supplements to pregnant women, infants, and young children who are both poor and at nutritional risk, is one of the country's most successful programs. Numerous studies have found a direct link between the WIC Program and a marked reduction in low birth weight babies. Low birth weight is, of course, one of the leading causes of infant mortality.

Last year, the long-awaited national evaluation of the health impacts of WIC was released by USDA. This study, one of the most indepth evaluations ever conducted of a federal social program, found: WIC reduces late fetal deaths by one-fifth to one-third; substantially reduces prematurity rates; increases head circumferences in infants born to WIC mothers, which usually means larger brain size; increases the number of low-income pregnant women receiving adequate prenatal care and the numbers of children who are adequately immunized; improves diets and nutritional intakes; and, it appears to result in improved cognitive performance in young children.

Earlier studies also found very cost-effective results, such as the Harvard School of Public Health study that found that each $1 invested in the prenatal component of WIC saved $3 in hospitalization costs. In addition, a recent study conducted by the Missouri Department of Health found that each dollar spent on the prenatal component of WIC saved 49 percent in Medicaid costs just in the first 45 days after birth.

In short, these studies show WIC to be one of the most effective of all federal programs. But with a caseload of 3.4 million persons, WIC is reaching fewer than one-half of those women, infants, and children at nutritional risk who are eligible for it.

Given the success of the program, I believe that we ought to be able to find ways or we ought to set our priorities in such a fashion that we clearly reach more of those who are at nutritional risk and in need of the program, but who cannot currently get its benefits due to funding limitations.

Both the Chiles budget proposal under consideration before the Senate Budget Committee, which I understand is to be favorably reported this morning, and the budget resolution adopted last week by the House Budget Committee, follow this course of action with regard to the WIC Program. Both resolutions would reduce the deficit by at least $36 billion, the annual deficit reduction envisioned by the Gramm-Rudman-Hollings law, while finding the resources to serve more of those eligible for WIC.

The Chiles budget, for example, assumes appropriations of $1.865 billion for WIC, consistent with the level called for in S.J. Res. 99, a resolution recently introduced by Senators DeConcini, Hollings, Johnston, Leahy, Harkin, and a number of other Senators. A similar, but somewhat smaller, increase is contained in the House budget resolution.

While this is a rather modest increase—the $1.865 billion level assumed in the Chiles budget would increase the percentage of eligible people being served in WIC by only about 4 percentage points—it is nonetheless very important. Tens of thousands of poor children may have larger brains and better health—and in some cases may even live rather than die—if these funding levels are provided.

I certainly recognize that the budget resolution has no line item impact and that the appropriations allocations are usually tight, and that the Appropriations Committee has to be the final arbiter of how much to provide for a program, but I very much hope that the WIC funding level assumed in the budget resolution as a congressional priority in both Houses now, are fully reflected in the 1988 appropriations bill.

I would hope that we would not be taking funds assumed in the budget for WIC and diverting them for other uses that almost necessarily will be less critical in terms of improving the health of some of the most vulnerable women and children in our society.

I would like to turn briefly to the Commodity Supplemental Food Program, which serves 140,000 low-income pregnant women, infants, and children also in 26 local areas, and about 42,000 low-income elderly persons. This is a small program, with about a $41.5 million funding level this year.

Unfortunately, there is an unmet need here also with a backlog of unfunded applications for these programs for poor pregnant women, infants, and children, and the elderly poor now sitting at USDA. Last year, Congress provided for a modest increase for CSFP, raising its appropriation from $36.8 to $41.5 million in fiscal year 1987 to meet a portion of this unmet need. I would also urge the subcommittee to continue on this path this year and provide another incremental of about the same magnitude, somewhere in the vicinity of $5 million.

Last year, the Senate Committee report accompanying the agricultural appropriation bill said:

> The committee is aware that applications are on file or are in the process of being prepared by several States, and expects the Department to fund these applications to the full extent that the appropriation allows without reducing current CSFP caseloads.

Unfortunately, only one of the pending applications, Arizona's, has been funded. Those from the six other states remain unfunded and will continue to be unfunded unless further increment in the program's appropriation level is provided.

Finally, I would like to comment briefly on the Puerto Rico block grant. The Food Security Act of 1985 recognized the fact that the Puerto Rico block grant was initially funded at $825 million, but was frozen for 4 straight years while food prices rose and the unemployment increased to nearly 20 percent in Puerto Rico.

To prevent that situation from deteriorating even further, the Food Security Act provides an inflation adjustment for Puerto Rico starting in 1987. Even Senator Helms stated that he could understand the arguments that favored these adjustments and thought that they had more merit than any other food program under consideration during the conference.

The conferees who worked on the act drafted it in such a fashion that the Puerto Rico funding levels would not simply be authorization ceilings, but mandatory funding from the Food Stamp appropriation. These prescribed amounts, about $880 million for 1988, shall be paid to Puerto Rico, and the Appropriations Committee took note of that last year and provided funding in accordance with the Food Security Act.

I would note that even after the $879.75 million funding level for 1988, the food purchasing power of the block grant funds would still be well below what it was when the block grant program started, and 20 percent lower than when the Puerto Rico food stamp program was converted to a block grant. No other group of poor families in America has had their food assistance benefits cut so sharply.

I would just conclude by noting that the maximum benefit in Puerto Rico is now about one-third or one-quarter lower than the United States, although food costs are higher, but the income limits are much lower. Of course, the per capita income is less than that of even the poorest states in the South. I would hope that the committee, as it did last year, would provide the funding levels authorized in the Food Security Act of 1985.

Thank you very much, Mr. Chairman.

Senator BURDICK. With regard to the WIC Program, in your definition of eligible, are you referring to those who are nutritionally at risk, those who are income eligible, or both?

Mr. GREENSTEIN. This is a very important question, Mr. Chairman. I am using the most restrictive definition, using both income and nutritional risk. If you look at those eligible on an income basis only, the numbers eligible from the latest figures that the Department has just released, they are somewhere in the vicinity of 9 to 10 million, and we would, by those measurements, be reaching only a little over one-third.

The Department has, for several years, been working on estimates, including state-by-state estimates, of the number of eligibles based on an income and nutritional risk, this is both, and has adopted a fairly stringent nutritional risk test in giving those estimates. While the Department is still applying them, they are at this point in the vicinity of 7 to 7½ million after the nutritional risk test is added in.

Even when you take both nutritional risk and income into account, we are reaching now about 45 percent of those eligible on an income and nutritional risk basis, both, and a little over 33 percent on an income basis only.

Senator BURDICK. The 1985 farm bill included major changes in employment and training features of the Food Stamp Act. If this employment and training program were to have maximum benefit, how much funding would be required in fiscal 1988 and what would be the impact on the overall Food Stamp Program?

Mr. GREENSTEIN. If I recall correctly, the employment and training provisions of the Food Security Act of 1985 have prescribed funding levels for the employment and training provisions, which I believe is nondiscretionary, but is a set amount of the overall food stamp appropriation. My recollection, which I hope is correct, is that the level of the act is $60 million for fiscal year 1988.

It is difficult to say at this point just what the impact is going to be. The program started on April 1, 1987, and they are in many states being phased in only right now. Obviously, the hope is that they will keep the current point, and in the long run moderate the number of people who would need food stamps.

I would caution that the impacts are likely to be quite modest. The Food Stamp Program, unlike the Welfare Program, the food stamp recipients, other than the elderly and people of that sort, are people who stay on the Food Stamp Program for a relatively short period of time anyway. You don't have the proportion of people that you do in welfare who may be on for a longer number of years.

Therefore, helping the people to gain employment doesn't shorten by as many months the benefits received as it does when you move someone off the Welfare Program into employment. I don't think that we are likely to see dramatic cost savings as a result of these programs, but if they are successful, hopefully, we will see modest positive results.

Senator BURDICK. As you may know, the committee indicated a strong interest in the study of the WIC Program, and directed the Food and Nutrition Service to pursue a followup. Today, FNS indicates that it has not followed the subcommittee's recommendation because of certain specifications. Would another agency have been equipped to perform this research effort?

Mr. GREENSTEIN. I guess, you are really asking two questions, Senator Burdick. Let me answer first, would another agency be more appropriate. I don't think so. I think there is more expertise in terms of funding and overseeing these evaluations of the programs such as WIC in USDA than there would be in any other agency.

I do not know this for a fact, but I would imagine that the reluctance to pursue the study is not one coming from the career people in FNS, but is, for whatever reason, I would presume, I don't know this for a fact, being at higher level. I would presume that the same problem would apply if one moved this to another agency.

I don't think that shifting agencies is the issue. I have not myself studied in the field of technical issues involved. I know the Department is claiming that there are technical issues hindering the study, but there are other people outside of the Department who believe that the Department is overstating that problem, and that the studies can be pursued. I guess, I would imagine that the subcommittee feels that it is appropriate that it go further in directing FNS to do it, rather than looking for another USDA agency.

Senator BURDICK. Thank you.

Senator COCHRAN. Thank you, Mr. Chairman.

Let me join you in expressing our appreciation to Mr. Greenstein for his testimony. He is always very helpful to this committee by helping us understand the food and nutrition programs better and by giving us a point of view which I think is very good for us to hear.

We appreciate your assistance to the committee, and thank you for being here.

Mr. GREENSTEIN. Thank you, Senator. As you know, as I have told you on other occasions before, but I will take this opportunity again. I want to express my great appreciation for your leadership with regard to the WIC Program in recent years, and especially while you were chairman of the subcommittee, without question. I think that people all over the country are deeply grateful for this.

Senator COCHRAN. Thank you very much.

[The statement follows:]

STATEMENT OF ROBERT GREENSTEIN

Mr. Chairman, I appreciate the opportunity to appear before the Subcommittee today. I am Robert Greenstein, director of the Center on Budget and Policy Priorities. The Center is a non-profit research and analysis organization that focuses on federal budget and policy issues affecting low income Americans.

I would like today to discuss several issues relating to the budget for the Food and Nutrition Service. FNS programs have long been a particular interest of mine. In 1977 and 1978 I served as Special Assistant to Secretary Bergland, specializing in domestic food assistance issues. In 1979 and 1980, I served as Administrator of FNS.

The WIC Program

There is little doubt that the Special Supplemental Food Program for Women, Infants, and Children (WIC) is one of the nation's most successful social programs. WIC provides prescription food supplements to pregnant women, infants, and young children who are both low income and at nutritional risk. Numerous studies have found a direct link between the WIC program and a marked reduction in the incidence of low weight births. Low birth weight is one of the leading causes of infant mortality and is associated with a number of health problems and disabilities among children.

Moreover, in 1986, the long-awaited national evaluation of the health impacts of WIC -- a five-year, $5 million study funded by USDA -- was released. This study, one of the most in-depth evaluations ever conducted of a federal social program, found stunning results. It documented that WIC:

- Reduces late fetal deaths by one-fifth to one-third
- Substantially reduces prematurity rates
- Increases head circumferences in infants born to WIC mothers (this usually means larger brain size)
- Increases the number of low income pregnant women receiving adequate prenatal care and the numbers of children who are adequately immunized
- Improves diets and nutritional intakes
- Appears to result in improved cognitive performance in children.

As you may know, earlier studies have also underscored the cost-effectiveness of WIC. The well-known evaluation conducted at the Harvard School of Public Health found that each dollar invested in the pre-natal component of WIC averted $3 in hospitalization costs (by significantly reducing the number of low birth weight infants, who generally must be kept in the hospital for longer periods after birth). In addition, a recent study conducted by the Missouri Department of Health found that each dollar spent on the prenatal component of WIC saved 49 cents in Medicaid costs just in the first 45 days after birth.

In short, these studies show WIC to be one of the most effective of all federal programs. Yet at a caseload of 3.4 million persons, WIC is reaching fewer than half of those eligible for it.

Given how successful this program is, we ought to be able to find a way to reach more of the low income pregnant women, infants, and children who are at risk and in need of the program -- but who cannot receive its benefits due to funding limitations. We ought to be able to find lower priority areas of spending to pare back so that the necessary funds can be invested in WIC.

I would note that in a speech to the Tax Foundation in December 1986, Senator Pete Domenici spoke of "national needs that are . . . compelling and need new resources" and stated that "most pressing in my mind is the seamless web of poverty, homelessness, hunger, and mental illness." He called for finding new resources for these needs by trimming spending for other, less critical areas.

Both the Chiles budget proposal under consideration before the Senate Budget Committee and the budget resolution adopted last week by the House Budget Committee follow precisely this course of action with respect to WIC. Both resolutions would reduce the deficit by at least $36 billion (the annual deficit reduction amount envisioned in the Gramm-Rudman-Hollings law) while finding the resources to serve more of those eligible for WIC. The House Budget Committee's plan assumes appropriations for WIC of $1.815 billion in FY 1988, or $100 million over the CBO current services estimate. The Chiles budget assumes appropriations of $1.865 billion for WIC, consistent with the level called for in S. Joint Res. 99, a resolution recently introduced by Senators DeConcini, Hollings, Johnston, Reid, Leahy, Harkin and a number of other senators.

The funding levels in the House Committee budget and in the Chiles budget would enable an additional 200,000 to 300,000 low income women and children to participate in WIC, bringing the proportion of eligible persons being served close to the 50 percent level. While this is a rather modest increase (the $1.865 billion level assumed in the Chiles budget would increase the percentage of eligible people being served in WIC by about four percentage points) it is nonetheless very important. Tens of thousands of poor children may have larger brains and better health – and in some cases may even live rather than die – if these funding levels are provided.

I recognize that the budget resolution has no "line item" impact and that the Appropriations Committee is, quite properly, the arbiter of how much to provide for individual programs. But I would very much hope that the WIC funding levels assumed in the budget resolution as a Congressional priority are fully reflected in the FY 1988 agricultural appropriations bill. I believe we should not be taking funds assumed in the budget for WIC and diverting them for other uses that almost necessarily will be less critical in terms of improving the health of some of the most vulnerable women and children in our society.

Commodity Supplemental Food Program

A second program area I would like to cover is the Commodity Supplemental Food Program (CSFP). The CSFP program is a small program that is similar to, and pre-dates, WIC. It provides nutritious food supplements to about 140,000 low income pregnant women, infants, and young children in 26 local areas, and to about 42,000 low income elderly persons. CSFP is a small program, with an appropriation of $41.5 million in FY 1987.

There is unmet need here, also, with a substantial backlog of unfunded applications at USDA for CSFP programs for poor women and children and for increased CSFP caseloads to serve more of the elderly poor at existing CSFP sites. Last year, the Congress provided a modest increase for CSFP, raising its appropriation from $36.8 million in FY 1986 to $41.5 million in FY 1987 to enable a portion of this need to be met. I would urge the Subcommittee to continue on this path this year and provide another increase of about the same magnitude (i.e., of about $5 million, of which about $2 million is necessary simply to cover inflation).

I would note that in the Senate Committee report accompanying the FY 1987 agricultural appropriation bill, the Committee stated: "the Committee is aware that applications are on file or are in the process of being prepared by several

States, and expects the Department to fund these applications to the full extent that the appropriation allows without reducing current CSFP caseloads. . . ." Unfortunately, only one of the pending applications (Arizona's) has been funded; those from six other states remain unfunded and will continue to be unfunded unless a further increment in the program's appropriation level is provided.

Puerto Rico Block Grant

In 1981, the Administration proposed that the food stamp program be ended in Puerto Rico and be replaced with a block grant funded at $825 million, which represented a significantly reduced funding level. The Administration stated that $825 million was the level needed to provide nutrition assistance to Puerto Rico in FY 1982.

From FY 1982 through FY 1985, the block grant remained frozen year after year at the $825 million level (and in FY 1986, it was actually reduced to $820 million, due to an across-the-board cut in the agricultural appropriations provisions of the Continuing Resolution). Yet during this same period, food prices continued to rise in Puerto Rico, and unemployment increased to the point where it approached 20 percent.

The Food Security Act of 1985 attempted to prevent this situation from deteriorating further and to stop benefits from eroding even more by providing inflation adjustments for Puerto Rico starting in FY 1987. The Act provided $852,750,000 for FY 1987 and $879,750,000 for FY 1988. Even Senator Jesse Helms stated during the conference on the Food Security Act that he could understand the arguments in favor of such adjustments and thought they had more merit than any other food program restorations under consideration in the conference.

The conferees who worked on this part of the Food Security Act of 1985 drafted the Act in such a fashion so that the Puerto Rico funding levels would not simply be authorization ceilings, but would rather be mandatory funding levels. The Act stipulates: "From the funds appropriated under [the Food Stamp] Act the Secretary shall . . . pay to the Commonwealth of Puerto Rico . . . $850,750,000 for the fiscal year ending September 30, 1987, $879,750,000 for the fiscal year ending September 30, 1988. . ."

The Appropriations Committee took note of this mandate last year, earmarking $852,750,000 of the FY 1987 food stamp appropriation for the Puerto Rico block grant. For FY 1988, both the budget resolution approved by the House Budget Committee and the Chiles budget plan assume the $879,750,000 level reflected in the Food Security Act. The Senate Budget Committee regards the provision of this amount to Puerto Rico as mandatory, not discretionary (since the Food Security Act stipulates that $879,750,000 of the food stamp appropriation must be provided for the Puerto Rico block grant).

Nevertheless, the Administration has proposed to ignore the directives of the Food Security Act and to reduce block grant funding back down to $825 million. At this level, block grant funding would be nearly 15% lower in food purchasing power than it was when the block grant was instituted in FY 1982 -- and 25 percent lower in food purchasing power than the Puerto Rico food stamp program was in FY 1982 (before the program was replaced by a block grant at a substantially reduced funding level in July 1982).

Even at the $879,750,000 funding level, the food purchasing power of the block grant funds will still be far below what it was when the block grant was started in 1982 (and 20 percent lower than under the Puerto Rico food stamp program prior to conversion to a block grant). No other group of poor families in America has had their food assistance benefits cut so sharply. Further reductions in food purchasing power for poor families in Puerto Rico should be avoided.

Moreover, USDA's own studies of the Puerto Rico block grant program reveal that even extremely poor households on the island have had their benefits reduced by these cuts and freezes. The USDA studies show that when the food stamp program was terminated in 1982 and replaced by a block grant at reduced funding levels, average benefit levels were cut for all categories of households whose gross incomes were above 25 percent of the poverty line (or about $2,750 a year for a family of four). Since 1982, the cuts have grown larger due to the lack of any inflation adjustment in block grant funding levels from FY 1982 through FY 1986.

These cutbacks in food aid benefits affected one of the poorest populations anywhere in the U.S. Sixty-two percent of the Puerto Rico population falls below the poverty line, according to the 1980 Census – which was five times the proportion of the U.S population that was poor that year. Moreover, per capita income in Puerto Rico was $3,897 in 1983, or less than half the per capita income of Mississippi, the poorest state in the U.S. (Mississippi's per capita income was $8,098 in 1985.) And the unemployment rate in Puerto Rico has averaged 19 percent over the past 12 months, or more than two and one-half times the national average.

Finally, while poverty is much more severe in Puerto Rico than on the U.S. mainland, food benefits are now substantially lower in Puerto Rico, even though surveys have found that food costs more in Puerto Rico (because most of its food is imported from the U.S.). While the maximum food stamp benefit for a family of four with no other income is $271 in the U.S. food stamp program, it is $199 in Puerto Rico. Income eligibility thresholds are also far lower. On the island, a family of four must have gross income below $8,000 to qualify for food benefits, a level more than $3,000 below the poverty line. In the U.S., the income limit for the food stamp program is 130 percent of the poverty line, or about $14,000 for a family of four, some $6,000 higher than the income limit in Puerto Rico.

These disparities will escalate further in the years ahead if Puerto Rico block grant funding is not placed at the $879,750,000 level envisioned in the Food Security Act. I trust the Subcommittee will not go along with the Administration's effort to use the appropriations process to override the funding levels mandated in the Food Security Act – and will recognize that food assistance for the poor has already been reduced far more in Puerto Rico than in any other state or territory.

CONGRESSIONAL WITNESS

STATEMENT OF HON. PETE WILSON, U.S. SENATOR FROM CALIFORNIA

Senator BURDICK. Senator Wilson from the great state of California.

Senator WILSON. Thank you very much, Mr. Chairman.

Mr. Chairman and Senator Cochran, I am grateful for the opportunity to testify before you this morning. Interestingly enough, I am sure that all of us share a certain sense of history. It happened on this day in 1787 that James Madison wrote to Edmund Randolph suggesting the goals of the Constitutional Convention.

It struck me as appropriate that I should have the opportunity to appear before you on the same day. Just as the delegates to the Constitutional Convention developed the plan that determined the course of this great nation, members of the subcommittee will set the budget priorities that will, to a large extent, determine the fate of American agriculture.

Mr. Chairman, I appear before you today to request that two programs be added to that list of priorities, namely, the Targeted Export Assistance Program, commonly called TEA, and the Central American Medfly Eradication Program, CAPMED.

"The star of the 1985 farm bill," is how Mr. Tom Kay, the Administrator of the Foreign Agricultural Service, characterized the Targeted Export Assistance Program during recent Senate Agriculture Committee hearings. That is putting it mildly, Mr. Chairman. The success of the TEA Program has been simply astonishing.

Designed to provide market development assistance to commodities, which have lost sales due to the unfair trading practices and illegal subsidies of our trading partners, the TEA Program has made it possible for many industries across the nation to significantly increase their market share abroad.

Consider this track record, Mr. Chairman. Of the 12 key horticultural commodities that received TEA funding, all posted tremendous export gains. For example, the almond industry increased exports to Western Europe, Japan, and Korea by 141 percent. Similarly, dried onion exports rose 62 percent, and, the canned peach industry was able to increase exports 87 percent, resulting in increased exports of 200,000 cases to Japan alone.

Overall, Mr. Chairman, exports for horticulture were up 30 percent, with exports to Japan and the European Community up 52 percent and 32 percent respectively. Horticultural sales to other parts of Western Europe were in total up 74 percent. An incredible gain was posted in Taiwan, up 46 percent.

What does this all mean? Quite simply, at a time when the outlook for American agricultural exports has been bleak at best, the TEA Program has restored prosperity to several of our most vulnerable industries.

It is understandable that I was shocked, indeed dumbfounded, to learn that the administration has recommended a $30 million reduction in TEA funds for fiscal year 1988. This is especially disturbing after listening to the administration espouse the expansion of U.S. agricultural exports as one of their top priorities.

Clearly, the targeted export assistance program has been a proven success in achieving this goal. For this reason, I am requesting that the subcommittee restore, if not increase, funding to the TEA Program for fiscal year 1988.

Of equal importance to the economic well-being of both the American taxpayer and agricultural producers, most notably in the states of California, Florida, and Texas, is our eradication program CAPMED. The benefits of this program to American agriculture are immeasurable. Without it, we face the risk of a severe economic impact resulting from an invasion of the Mediterranean fruit fly.

I know that Senator Cochran, on many occasions, has shared with me a concern about the problem, so I need not belabor the point with the knowledgeable experts serving on this committee that tremendous damage to basic industry can be caused by a pest that goes unchecked.

Without the CAPMED Program, we face the risk of that kind of severe economic impact resulting from an invasion of Mediterranean fruit flies.

As you may know, Mr. Chairman, the last California invasion of this fruit fly cost $300 million in eradication costs and lost production. Even more alarming are the estimated losses which would result from a future infestation in California and Florida. This would cost between $3.2 and $4.6 billion.

While the projected 2-year cost for the CAPMED project totals around $30 million, the financial burden would not fall solely on the United States. It is expected that the Food and Agriculture Organization of the United Nations, FAO, and other developed countries, namely, Guatemala, would contribute almost half of the funding necessary for CAPMED.

The United States, as the main beneficiary of the program, would be expected to contribute the remaining $15 million over a 2-year period. However, FAO and Guatemala, absent a financial commitment to this program by the United States for fiscal year 1988, will in all likelihood withdraw all support from the program. This would spell certain disaster to our fruit and vegetable producers.

Further, many countries in lucrative Pacific Rim markets ban imports from the United States because of fear that our fruits and vegetables could harbor Mediterranean fruit flies. I believe that the United States should not be penny-wise and pound foolish when it comes to protecting America's agricultural industry. If the possibility of a Medfly infestation can be eliminated, it will greatly enhance the level of trade, creating new jobs and commerce both in the United States and throughout the Caribbean Basin.

For these reasons, I would urge the subcommittee to recommend an additional $7.5 million in funding for CAPMED, bringing the total budget request for Medfly eradication to $16.6 million for fiscal year 1988.

In closing, Mr. Chairman, I would like to stress the importance of both the targeted export assistance program and the Central American Medfly eradication program. Without adequate federal assistance to these two programs, it would be difficult to ensure the economic vitality of American agriculture, and especially that very vulnerable horticultural sector.

Thank you.

Senator BURDICK. Thank you.

Senator Cochran, do you have any questions to ask the Senator?

Senator COCHRAN. I was curious about whether or not Edmund Randolph wrote James Madison back. I think he ended up opposing ratification.

Senator WILSON. I am glad you asked that question. I should have known better than bring that up before a keen student of history.

Senator COCHRAN. I am very glad, because you make some points that I think are very important for us to understand and, that is, when the government does get involved with the private sector and work in a collaborative way to help increase exports, for example, we can be successful. I think that this is a story that really comes through in your testimony.

There are other examples of programs that are working. I think that it is important to focus attention on those where we are seeing increases in exports and success, so that we will put the emphasis in those areas, again to continue those successes.

We certainly know that we have to improve on the performance of the last few years in the area of our trade situation. A $172 billion trade deficit is intolerable, and it will have to be corrected.

There are other witnesses this morning who are also going to talk on that same subject, but I congratulate you and thank you for the leadership you are providing, particularly on the Targeted Export Assistance Program and in many other areas, to try to do something positive about this trade situation. Your testimony is very helpful to us, and we appreciate your being here.

Senator WILSON. Thank you very much, Senator Cochran. By way, I guess, of mutual admiration, I think a number of leading farmers are seeking to recapture their lost export markets. I think that the marketing provisions on which you took the lead in the 1985 farm bill have gone very, very far toward making that possible. I congratulate you in that effort.

I think that when it comes time to reexamine the 1985 farm bill, in terms of the efforts that may be made to reduce the costs, my own personal view is that the marketing loan provisions are the most successful thing, along with TEA, that we have been able to do. While they are not cheap, they are effective, and it seems to me that there are other areas for the marketing loans that we might look to rather than eliminating what has been a demonstrated success.

Senator COCHRAN. Thank you very much, I appreciate that.

Thank you, Mr. Chairman.

Senator BURDICK. I hope that you don't wait for another historical occasion before you come to see us again.

Senator WILSON. I think that is a very generous invitation, and I will take you up on it.

[The statement follows:]

STATEMENT OF SENATOR WILSON

Mr. Chairman and members of the subcommittee, on this day in 1787, James Madison wrote Edmund Randolph suggesting the goals of the Constitutional Convention. Just as the delegates to the Constitutional Convention developed the plan that determined the course of this great nation, members of this subcommittee will set the budget priorities that will to a large extent determine the fate of American agriculture.

I appear before you today to request that two programs be added to that list of priorities, namely, the Targeted Export Assistance [TEA] Program and the Central American Medfly Eradication Program [CAPMED].

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Overall, Mr. Chairman, exports for horticulture were up 30 percent, with exports to Japan and the European Community up 52 percent and 32 percent, respectively. Horticultural sales to other parts of Western Europe were, in total, up 74 percent. An incredible gain was posted in Taiwan, up 146 percent. What does this all mean? Quite simply, at a time when the outlook for American agricultural exports has been bleak at best, the TEA Program has restored prosperity to several of our most vulnerable industries.

It is understandable that I was shocked, indeed dumbfounded, to learn that the administration has recommended a $30 million reduction in TEA funds for fiscal year 1988. This is especially disturbing after listening to the administration espouse the expansion of U.S. agricultural exports as one of their top priorities. Clearly, the Targeted Export Assistance Program has been a proven success in achieving this goal. For this reason, I am requesting that the subcommittee restore, if not increase, funding to the TEA Program for fiscal year 1988.

Of equal importance to the economic well-being of both the American taxpayer and agricultural producers, most notably in the states of California, Florida, and Texas, are our eradication efforts under the Central American Medfly Eradication Program [CAPMED]. The benefits of this program to American agriculture are immeasurable. Without it, we face the risk of a severe economic impact resulting from an invasion of the Mediterranean fruit fly.

As you may know, Mr. Chairman, the last California invasion of this fruit fly cost $300 million in eradication costs and lost production. Even more alarming are the estimated losses which would result from a future infestation in California and Florida. This would cost between $3.2 and $4.6 billion.

While the projected 2-year cost for the CAPMED project totals around $30 million, the financial burden would not fall solely on the United States. It is expected that the Food and Agriculture Organization of the United Nations [FAO] and other developed countries, namely Guatemala, would contribute almost half of the funding necessary for CAPMED. The United States, as the main beneficiary of the program, would be expected to contribute the remaining $15 million over a 2-year period. However, FAO and Guatemala, absent a financial commitment to this program by the United States for fiscal year 1988, will, in all likelihood, withdraw all support from the program. This would spell certain disaster to our fruit and vegetable producers.

Further, many countries in lucrative Pacific rim markets ban imports from the United States because of fear that our fruits and vegetables could harbor Mediterranean fruit flies. I believe that the United States should not be penny-wise and pound-foolish when it comes to protecting America's agricultural industry. If the possibility of a Medfly infestation can be eliminated, it will greatly enhance the level of trade, creating new jobs and commerce both in the United States and throughout the Carribean basin.

For these reasons, I would urge the subcommittee to recommend an additional $7.5 million in funding for CAPMED, bringing the total budget request for Medfly eradication to $16.6 million for fiscal year 1988.

In closing, Mr. Chairman, I would like to stress the importance of both the Targeted Export Assistance Program and the Central American Medfly Eradication Program. Without adequate federal assistance to these two programs, it would be difficult to ensure the economic vitality of American agriculture. Thank you.

SUNKIST GROWERS, INC.

STATEMENT OF WILLIAM K. QUARLES, VICE PRESIDENT FOR GOVERNMENT AFFAIRS

Senator BURDICK. Our next witness is William Quarles, vice president for government affairs, Sunkist Growers, Inc.

You may proceed, Mr. Quarles.

Mr. QUARLES. Thank you, Mr. Chairman.

My name is William K. Quarles. I am vice president of government affairs for Sunkist Growers, Inc. Sunkist is a nonprofit agricultural marketing cooperative consisting of approximately 6,000 growers who produce citrus in Arizona and California. Varieties produced by Sunkist members are navel and valencia oranges, lemons, grapefruit, and tangerines.

Sunkist members primarily produce citrus for the fresh fruit market, which is packed in 66 citrus packinghouses throughout the two states. Fruit that cannot be sold fresh is used to produce a vast array of processed citrus products.

Approximately one-third of Sunkist's total volume is exported. Since fresh citrus is a perishable product, our export markets are vital to the economic well-being of Sunkist members.

It is a pleasure for me to be appearing this morning before the subcommittee to discuss Foreign Agricultural Service, FAS, appropriations for the 1988 fiscal year. Over the years, FAS personnel and programs have had a heavy hand in guiding, maintaining and enlarging U.S. agricultural sales abroad. Today, with U.S. farm exports in drastic and unprecedented decline, the subcommittee's budgetary decisions regarding FAS will be key in determining the future course of U.S. farm trade.

I would like to spend most of my time this morning talking about the funding needs of two FAS programs—the Cooperator Market Development Program and the closely related Targeted Export Assistance, TEA, Program, both of which have had remarkable success in moving U.S. farm exports. These programs are being emphasized in part because this is where Sunkist's experience lies and in part because such programs are believed to be essential to strengthening our exports abroad.

Sunkist participated in the Cooperator Program for many years until fiscal year 1986, when TEA was created. As a former and perhaps future cooperator participant, it is our view that the sharing of expertise and funds afforded by the Cooperator Program has greatly enhanced past market development efforts for Sunkist and other cooperators.

The program has been particularly beneficial in directing cooperators, most of whom are inclined to emphasize short-term market opportunities, to invest in long-term commitments required to develop and maintain future market outlets.

Sunkist, for example, has used cooperator funds in years gone by to develop new market opportunities in the Pacific rim to replace sales lost in the European Economic Community as a result of illegal Mediterranean tariff preferences. This outward, long-term orientation is essential if American agriculture, which is increasingly being closed out of traditional markets, is to survive a world trade.

The one notable shortcoming of the Cooperator Program is its severely limited funding. Funding for FAS market development, which is the budgetary line item that includes the Cooperator Program, the Agricultural Trade Offices, market development staff and related administrative expenses, was at $45,972,000 for fiscal year 1986. In 1987, this amount was increased in a supplemental appropriation by $2,108,000 to cover increases in staff costs for a total of $48,080,000.

Given the abundance of agricultural marketing barriers and restraints abroad and the resulting vigorous market promotion to help overcome these restraints and maintain our overseas presence, this level of funding is plainly inadequate.

The example of Sunkist may help put this into perspective. In fiscal year 1985, Sunkist received $745,000 in FAS Cooperator funds to overcome market restraints and promote abroad. That year, the U.S. citrus industry sustained $40 to $45 million in damages as a result of the previously mentioned European Economic Community Mediterranean tariff preference scheme being prosecuted under section 301 of the Trade Act of 1974.

We were also sustaining injury from unfair direct export subsidies on fresh citrus, EEC processing subsidies on citrus products, Japanese tariff and nontariff barriers on fresh oranges, and a Korean prohibition of imports of oranges for general consumption. The export damage being sustained abroad in the aggregate virtually dwarfed Sunkist's cooperator activities.

We strongly urge that the overall FAS budget be increased by $100 million, and that would include the President's budget of $85.6 million, $9.9 million to provide additional FAS personnel, $2.4 million as a devaluation adjustment for the dollar, to restore FAS's spending impact abroad, $9.1 million to bring the value of the Cooperator Program and the cooperators themselves back to pre-Gramm-Rudman 1986 levels, and $2 million as a devaluation adjustment for cooperator spending.

One of the central points I would like to leave with the subcommittee this morning is that the Cooperator Program can and will assist in promoting agricultural exports if its current budgetary constraints are lifted and the program funding expanded to help meet the challenge of market barriers abroad.

It was in recognition of this funding limitation that the Targeted Export Assistance Program was conceived by Congress. As Senator Wilson mentioned, it has been called the star of the 1985 farm bill. This program mandated $110 million in funds or an equal amount of CCC commodities during fiscal years 1986 through 1988 for market promotion to offset unfair trading practices abroad. For fiscal years 1989 through 1990, the amount mandated was $325 million.

Priority funding for all years is to be given to those commodities that have been subject to a successful 301 action or victimized by retaliation as a consequence of a section 301 action. By virtue of its longstanding 301 case against the European Community, Sunkist qualifies as a priority beneficiary.

Priority TEA assistance in the amount of $7.9 million during fiscal year 1986 was allocated for market promotion in the Pacific Rim countries. This money, together with Sunkist matching funds amount of 33 percent of the TEA funds spent, enabled Sunkist to significantly increase its advertising and promotional budget for all of our foreign markets, including Japan.

In Japan alone, demand was stimulated to the extent that we were able to market more second grade or lower quality fruit in Japan at higher prices than anyone ever thought possible, to the extent that grower returns have been measured in excess of $16 million for these particular volumes. This was just in Japan alone. This was a considerable success given that Sunkist had a smaller than normal summer orange crop, with a disproportionate amount of second grade fruit due to adverse weather conditions.

I would hasten to add that Sunkist is not alone in TEA success stories. Senator Wilson just mentioned the experience of the 12 horticultural crops that participated, and I won't cover that again. But a great deal of credit for this success must go to the Foreign Agricultural Service, which has worked vigorously, with extremely limited staff, to develop program guidelines designed to ensure program efficiency and accountability.

It is extremely important that FAS get the wherewithal to be able to administer these programs properly. FAS is currently administering about $8 billion in agricultural export programs. It is doing this with a staff of 800 people, less than 1 percent of the total USDA personnel. They are doing it with 8 percent fewer people today than in 1981. If the FAS budget is limited to $86 million this forthcoming fiscal year, then FAS will have to further reduce its staff by about 3 percent.

I think that it is widely recognized that the TEA and Cooperator Programs are two of the most successful U.S. programs in agriculture. To the extent that we can satisfactorily fund those two programs, and also satisfactorily fund FAS, to give them the wherewithal to properly administer these programs, it is going to go a long way toward helping us remove agricultural problems abroad.

Thank you, Mr. Chairman, and I will be happy to stand for questions.

Senator BURDICK. Does Sunkist use the Cooperator Program for export promotion?

Mr. QUARLES. Yes, sir; Sunkist historically has used the Cooperator Program, until 1986 when the TEA Program was developed. Then Sunkist has used the TEA Program 100 percent, and has not participated in the Cooperator Program. The reason is that Sunkist must put up dollar-for-dollar matching funds under the Cooperator Program, and under the TEA Program, Sunkist puts up $1 for every $3 that it gets from the U.S. government, so we can build a bigger advertising and promotional fund using the TEA Program. But the Cooperator Program remains a very important program for many, many agricultural commodity groups.

Senator BURDICK. In your statement, Mr. Quarles, you mention that all horticultural commodities received $45 million in TEA funds for the entire fiscal year 1986, yet the first-quarter gain was $102 million. If the TEA funds had such impressive returns for these special crops, how can we concentrate on expanding the program to benefit other programs to benefit other crops, and what are some of the other crops that might be able to yield such a return?

Mr. QUARLES. That $45 million went to all horticultural crops that happened to participate in the TEA Program that year. The remainder of the $110 million went to other commodity groups across the broad spectrum of U.S. agriculture.

It is my very strong belief that with the Cooperator Program and the TEA Program, the basis for both programs is that through advertising and promotion, we can establish and stimulate demand for agricultural products, to the extent that other commodity groups elect to participate in these programs, and to the extent that they have exportable commodities, I am absolutely convinced that they will be able to export much or a good deal of their commodities, if they choose to participate in these programs.

Senator BURDICK. Sunflowers received TEA funds.

Mr. QUARLES. I believe that is correct, Senator.

Senator BURDICK. Do you think it would benefit corn and wheat?

Mr. QUARLES. I think that it would be. I believe they are interested in participating, and some do.

Senator BURDICK. Senator Cochran.

Senator COCHRAN. Mr. Quarles, we appreciate your taking the time to come to the subcommittee hearing this morning. We appreciate hearing some specific suggestions, too, in addition to just overall requests for additional funds for these programs.

I am interested in the observation you make about documents that are being obtained by the Foreign Agricultural Service in connection with the Targeted Export Assistance Program. You suggest that these documents, which relate to marketing and advertising strategies should end up in the hands of competitors who could preempt your activities and make it more difficult for you to sell in overseas markets through these strategies, and would be counterproductive to the program's original efforts.

Let me ask you this in connection with that area. Are you suggesting that we should include any language in our report making the observation that this ought to be reviewed more carefully by the Foreign Agricultural Service? Is there anything, in your judgment, that the subcommittee could do about this problem?

Mr. QUARLES. This is a concern that extends to what we believe to be perhaps excesses under the Freedom of Information Act. FAS personnel believe that they may be forced to divulge some of the marketing plans that must be submitted in order to justify participation in some of these programs, the marketing plans that a potential cooperator would expect to implement if that cooperator should be allowed participation in the program.

If some of these folks at FAS are correct, then our foreign competitors, through the Freedom of Information Act, through a domestic representative, could get copies of our marketing plans in advance, and then position themselves to take full advantage of that strategy.

It kind of boggles the mind to believe, for example, that General Motors could go to the Japanese Government and get Toyota's marketing plans for the United States for their implementation. It is similarly mind boggling to believe that U.S. agricultural groups would prepare a marketing plan strategy for increasing and stimulating demand of any particular commodity in a foreign country, and then have the U.S. Government turn those plans over to a foreign competitor prior to implementation.

I think that it would be very helpful, Senator, if FAS were given direction from the Congress as to the confidentiality of those documents.

Senator COCHRAN. Thank you very much. I think that we ought to include language like that in our report.

Thank you very much, Mr. Chairman.

Mr. QUARLES. Thank you.

Senator BURDICK. Thank you.

[The statement follows:]

STATEMENT OF WILLIAM K. QUARLES

Good morning Mr. Chairman and members of the Subcommittee. My name is William K. Quarles. I am Vice President of Government Affairs for Sunkist Growers, Inc.

Sunkist is a non-profit agricultural marketing cooperative consisting of approximately 6,000 growers who produce citrus in Arizona and California. Varieties produced by Sunkist members are navel and valencia oranges, lemons, grapefruit and tangerines. Sunkist members primarily produce citrus for the fresh fruit market, which is packed in 66 citrus packinghouses throughout the two states. Fruit that cannot be sold fresh is used to produce a vast array of processed citrus products.

Approximately one-third of Sunkist's total volume is exported. Since fresh citrus is a perishable product, our export markets are vital to the economic well-being of Sunkist members.

It is a pleasure for me to be appearing this morning before the Subcommittee to discuss Foreign Agriculture Service (FAS) appropriations for the 1988 fiscal year. Over the years, FAS personnel and programs have had a heavy hand in guiding, maintaining and enlarging U.S. agricultural sales abroad. Today, with U.S. farm exports in drastic and unprecedented decline, the Subcommittee's budgetary decisions regarding FAS will be key in determining the future course of U.S. farm trade.

I would like to spend most of my time this morning talking about the funding needs of two FAS programs--the Cooperator Market Development Program and the closely related Targeted Export Assistance (TEA) program--both of which have had remarkable success in moving U.S. farm exports. These programs are being emphasized in part because this is where Sunkist's experience lies and in part because such programs are believed to be essential to strengthening our exports abroad.

The Cooperator Program, authorized under the Agricultural Trade Development and Assistance Act of 1954, has been structured and administered as a partnership between FAS and the private sector to develop, maintain, and expand commercial markets for U.S. agricultural commodities. With U.S. agricultural exporters facing new and increasingly unfair competition every season, the market maintenance function of this program has become particularly essential. To overcome these market restraints and familiarize potential foreign customers with U.S. farm products, FAS and cooperators work together sharing funds and expertise to develop and implement promotional activities.

Sunkist participated in the Cooperator Program for many years until fiscal year 1986, when TEA was created. As a former and perhaps future cooperator participant, it is our view that the sharing of expertise and funds afforded by the Cooperator Program has greatly enhanced past market development efforts for Sunkist and other cooperators. The program has been particularly beneficial in directing cooperators, most of whom are inclined to emphasize short-term market opportunities, to invest in long-term commitments required to develop and maintain future market outlets. Sunkist, for example, has used cooperator funds in years gone by to develop new market opportunities in the Pacific Rim to replace sales lost in the European Economic Community as a result of illegal

Mediterranean tariff preferences. This outward, long-term orientation is essential if American agriculture, which is increasingly being closed out of traditional markets, is to survive in world trade.

The one notable shortcoming of the Cooperator Program is its severely limited funding. Funding for FAS "market development" -- which is the budgetary line item that includes the Cooperator Program, the Agricultural Trade Offices, market development staff and related administrative expenses -- was at $45,972,000 for fiscal year 1986. In 1987, this amount was increased in a supplemental appropriation by $2,108,000 to cover increases in staff costs, for a total of $48,080,000. Given the abundance of agricultural marketing barriers and restraints abroad and the resulting need for vigorous market promotion to help overcome these restraints and maintain our overseas presence, this level of funding is plainly inadequate.

The example of Sunkist may help put this into perspective. In fiscal year 1985, Sunkist received $745,000 in FAS Cooperator funds to overcome market restraints and promote abroad. That year, the U.S. citrus industry sustained $40-45 million in damages as a result of the previously mentioned EEC Mediterranean tariff preference scheme being prosecuted under Section 301. We were also sustaining injury from EEC direct export subsidies on fresh citrus, EEC processing subsidies on citrus products, Japanese tariff and non-tariff barriers on fresh oranges, and a Korean prohibition on imports of oranges for general consumption. The export damage being sustained abroad in the aggregate virtually dwarfed Sunkist's cooperator activities.

One of the central points I would like to leave with the Subcommittee this morning is that the Cooperator Program can and will assist in promoting agricultural exports if its current budgetary constraints are lifted and program funding expanded to help meet the challenge of market barriers abroad.

It was in recognition of this funding limitation that the Targeted Export Assistance Program was conceived by Congress. Those that drafted Section 1124 of the Farm Security Act of 1985 properly understood that the California-Arizona citrus industry and many similarly situated agricultural sectors faced such wide-spread and profound marketing barriers abroad that export maintenance and enlargement would not be possible without greatly expanded market development and promotion activities.

Accordingly, under the terms of the TEA provision, $110 million in funds or an equal amount of CCC commodities was mandated during fiscal years 1986, 1987 and 1988 for market promotion to offset unfair trading practices abroad. For fiscal years 1989 and 1990, the amount of mandated funding is to increase to $325 million. "Priority" funding for all years is to be given to those commodities that have been subject to a successful Section 301 action or victimized by retaliation as a consequence of a Section 301 action. By virtue of its long-standing 301 case against the EEC, Sunkist qualifies as a priority beneficiary.

Although the TEA program is only in its second year of operation, and refinements are still being made, the program has been administered effectively with already impressive results. Indeed, many have characterized the TEA program as the "shining star" of the 1985 Farm Bill.

In the case of Sunkist, priority TEA assistance in the amount of $7.9 million was allocated for market promotion in the Pacific Rim countries. This money, together with Sunkist matching funds amounting to 33% of the TEA funds spent, enabled Sunkist to increase significantly its advertising and promotional budget for Japan this season. Expanded merchandising activities -- which included, among other things, stepped-up in-store promotion -- increased demand for Sunkist oranges by highlighting new uses for our fruit. As a result, both the volume of Sunkist shipments to Japan and the per-unit prices for those shipments have increased significantly over last year. The higher prices in Japan alone have resulted in increased grower returns in excess of $16.8 million. This is a considerable success, given that Sunkist had a smaller than normal summer orange crop with a disproportionate amount of second grade fruit due to adverse weather conditions.

I would hasten to add that Sunkist is not alone in TEA success stories. FAS has recently announced that twelve key horticultural commodities, all of which are receiving TEA assistance, posted sizeable export gains in dollar value and tonnage during the first quarter of this fiscal year compared to the same period a year ago. In terms of dollar sales, the gains were as follows:

Percentage Increase in Export Dollar Sales of Certain U.S. Horticultural Crops
(1st Quarter of Fiscal Year 86 vs. 1st Quarter of Fiscal Year 87)

1.	Grapefruit, fresh	39%	7.	Prunes, dried	25%
2.	Apples, fresh	61%	8.	Onions, dried	62%
3.	Grapes, fresh	34%	9.	Frozen french fries	43%
4.	Pears, fresh	54%	10.	In-shell walnuts	48%
5.	Canned peaches	87%	11.	Almonds, prepared	141%
6.	Raisins	9%	12.	Still wines	44%

These export gains have been attributed primarily to the aggressive promotional efforts undertaken in connection with TEA.

The export sales value of all twelve horticultural commodities referenced above was $420 million for the first quarter of this fiscal year; this compared to a sales value of $318 million during the same period of last year, or an export increase of $102 million for twelve commodities. When one considers that all horticultural commodities, including the above twelve and several others, received a total of $45 million in TEA funds for the entire 1986 fiscal year, the first quarter gain of $102 million underscores this program's impressive cost/benefit ratio. Even greater gains are expected as the TEA program becomes more established.

A good deal of credit for these successes must go to FAS, which has worked vigorously with an extremely limited staff to develop program guidelines designed to ensure program efficiency and accountability. Under their guidelines, for example, program participants are being encouraged to put up substantial matching funds which may include in-kind contributions, to ensure and reinforce industry commitment to this program. Sunkist endorses this guideline.

Another issue being reviewed by FAS for which Sunkist is particularly concerned relates to the public release of TEA proposals and marketing plans submitted in connection with TEA requests. These documents in many instances contain carefully constructed marketing and advertising strategies developed at great expense to the applicant and involving millions of dollars in industry trade. Such documents should be treated as privileged, business confidential information and not released to the public. Were foreign competitors to obtain copies of the proposed marketing activities, a preemptive campaign or counteroffensive might be launched by competitors, thereby diluting the very purpose of the TEA program. This is a very real possibility, and one that should not be allowed to occur.

Another concern, this one paramount, is that the current TEA funding level needs to be enlarged if the program is to continue being effective. As the TEA successes have become known, scores of agricultural entities have come to USDA requesting TEA assistance. Most can legitimately identify unfair trade barriers abroad that need to be overcome. Current requests for fiscal year 1987 TEA monies come to approximately $190 million, $80 million in excess of the authorized amount.

Because TEA, like the Cooperator Program, is one of the few farm programs that has shown demonstrable, positive results for American agricultural exports, your Subcommittee is encouraged to endorse increased TEA funding authority. This would not involve additional direct budgetary outlays, since the program is being administered through generic certificates for CCC-owned stocks, rather than through cash grants. Moreover, unlike many agricultural trade programs and proposals under consideration by the 100th Congress, the TEA program is fully consistent with international obligations and is directed at market expansion, not market restriction.

In short, Mr. Chairman, the Cooperator and TEA programs together, if adequately funded and aggressively administered, are certain to yield the kinds of agricultural export gains that Congress and this Subcommittee are dedicated to achieving. Maximum funding possible for these worthy programs is accordingly urged.

That concludes my remarks. I would be happy to take any questions the Subcommittee might have on these programs or other issues related to FAS funding.

U.S. Agricultural Export Development Council

STATEMENT OF CECIL WATSON, CHAIRMAN, NORTH DAKOTA STATE WHEAT COMMISSION, AND BOARD MEMBER, EXECUTIVE COMMITTEE, U.S. WHEAT ASSOCIATES, REPRESENTING THE U.S. AGRICULTURAL EXPORT DEVELOPMENT COUNCIL

ACCOMPANIED BY:
WINSTON WILSON, PRESIDENT, U.S. WHEAT ASSOCIATES, INC.
NELSON DENLINGER, EXECUTIVE VICE PRESIDENT, U.S. WHEAT ASSOCIATES, INC.

Senator Burdick. Our next witness will be Mr. Cecil Watson, chairman of the North Dakota State Wheat Commission, and board member of the executive committee, U.S. Wheat Associates, U.S. Agricultural Export Development Council. He is accompanied by Mr. Winston Wilson, president of the U.S. Wheat Associates, and Mr. Nelson Denlinger, executive vice president of the U.S. Wheat Associates.

We are certainly glad to have such good representation from North Dakota in the last few days.

Senator Cochran. Is that coincidental? [Laughter.]

Senator BURDICK. Gentlemen, you may proceed in any way you wish.

Mr. WATSON. Mr. Chairman, my name is Cecil Watson, and I am happy to be here on behalf of the U.S. Agricultural Export Council, whose 72 members participate in the Overseas Market Development Program administered by the Foreign Agricultural Service of the U.S. Department of Agriculture.

I am a diversified wheat farmer from Cavalier, ND, and I am currently the chairman of the North Dakota State Wheat Commission and also serve on the Board of U.S. Wheat Associates. Our State Commission in North Dakota has been very active in market development programs, and we are firm supporters of the cooperator concept.

If I may sound a brief parochial note, we also are very proud of the Northern Crops Institute located at North Dakota State University in Fargo, ND, that was begun several years ago to carry out market development training, research, and promotion programs for a variety of crops in our region.

Enclosed with my statement are a number of other attachments, including a summary of major recommendations for fiscal year 1988. I would like to suggest that the 1985 farm bill established a legislative framework which was designed to enable U.S. agricultural producers to be more competitive in the world market and regain lost export share. That process is already underway, but it has been a very difficult one for our producers. However, a great deal more work is needed before we reach our goal of increasing our exports in order to obtain a better return for farmers and the U.S. economy.

Mr. Chairman, we feel that the Cooperator Program is a unique undertaking between the private sector and government that has resulted in additional sales of U.S. agricultural products. Our members work in over 100 countries on a day-to-day basis; they develop programs to fit local needs. Sometimes it is simply enhanced communication; sometimes technical service is required; and other times a special promotion program is needed.

I believe our organizations have and will continue to make significant contributions to their respective industries and to U.S. agriculture as a whole.

In my view, one of the key ingredients in carrying out that mission is adequate funding for the Cooperator Program and the Foreign Agricultural Service. Our recommendation for fiscal year 1988 is an appropriation of at least $100 million, and I wish to underline that the request of $100 million is a minimal figure.

Funding for market development has been relatively stable over the last few years, but this year, in light of the many demands being placed upon cooperators and the Foreign Agricultural Service, we feel that this modest increase is absolutely essential.

Mr. Chairman, I would urge the members of this subcommittee to note a recent step by the House Agriculture Committee which, in its section of the trade bill, included provisions recommending the appropriation of additional funds for FAS above the amounts regularly appropriated consisting of $22.5 million in fiscal year 1987, $27.5 million in fiscal year 1988, $32.5 million in fiscal year 1989, and $32.5 million in fiscal year 1990. The language of the House Agriculture Committee report clearly indicates its view that additional funding is needed for FAS to carry out its responsibilities.

One area that will require a great deal of effort on the part of the Foreign Agricultural Service will be supporting the upcoming GATT round negotiations. Agriculture will be a focal point in these negotiations, and it will be of vital importance for the Department of Agriculture to be able to work closely with the Office of the U.S. Trade Representative.

I would like to point out that FAS has 100 fewer positions now than it did 10 years ago, and 51 less than it did 5 years ago. These reductions have been made in the face of growing demands placed on FAS which under the 1985 farm bill include 12 new or expanded export programs. Clearly, if we are serious about our commitment to the export market, we will need to provide the necessary resources and manpower.

While many have pointed to a weaker dollar as being good for increasing U.S. agricultural exports, I should point out that many competing exporters have currencies that are tied to the U.S. dollar. Thus, the anticipated benefits on the export side have not yet been that substantial. A weaker dollar has, however, substantially increased the cost of carrying out cooperator programs in certain areas, especially Japan and Western Europe. We would estimate these cost increases at roughly 30 percent.

Mr. Chairman, in closing, I would like to point out the need to resist either reducing export credits or increasing the origination fees on export guarantees which would eliminate utilization of the program. I could touch on other areas, but I will conclude and make myself available for questions.

We urge your continued support to meet the challenge ahead. Thank you.

Senator BURDICK. Thank you, gentlemen. Do you wish to make a statement?

Mr. WILSON. No, thank you, Mr. Chairman.

Mr. DENLINGER. I have no statement.

Senator BURDICK. Mr. Watson, Thank you for your very fine statement.

In the 1985 farm bill there are very specific tools for eliminating what you term the "deficit of demand." Do the Cooperator Program, the TEA certificates, certain long-term guaranteed credits, and Public Law 480 give opportunity and purchasing power?

Do you envision the role of the Cooperator Program as establishing long-term market opportunities for American producers?

Mr. WATSON. Yes, I do, very much so. The North Dakota Wheat Commission is also of that opinion. We believe that the Cooperator Program is essential for our export activities.

Senator BURDICK. In other words, it is not a short-term program, you view it as a long-term program?

Mr. WATSON. Absolutely.

Senator BURDICK. Once specific programs are established, do you expect that they will be maintained independently and no longer require federal government support?

Mr. WATSON. I will ask Mr. Wilson to answer that one.

Mr. WILSON. It is entirely possible, but I would have to say that it is not totally likely. There are a couple of reasons that I think that continued federal funding and involvement is necessary. One being, for example, in the wheat industry, the Wheat Commissions are checkoff boards in 30 states.

The Wheat Associates, despite the fact that it is receiving funds from only 14 wheat producer states, promotes wheat exports from many origins within the United States throughout the world. It is a little unfair for the states to ask the growers of North Dakota and Texas, and the other 12 states, to carry the load for the entire U.S. wheat industry.

The other area, which I think needs to be considered, is the fact that agricultural exports do play a key role do play a very key role in the U.S. economy. Certainly, the benefits accrue to many other sectors of the economy, other than agriculture. Consequently, it is certainly in the national interest.

We have, over time, seen the producer or industry contributions continue to increase, but in terms of total phaseout of federal funding in the future, I don't think that it is probably going to happen any time soon. It is a very young program now, and it is particularly critical at this point because most of the agricultural programs in the country are designed to lower production, decrease acres.

Senator BURDICK. What should be the program priorities of FAS with respect to export enhancement?

Mr. WILSON. The Export Enhancement Program has been, we believe, a very successful program. We estimate that during the current marketing year, about 20 percent of the total U.S. wheat exports will be under the Export Enhancement Program.

There are some problems, obviously, one is the fact that many traditional U.S. customers have not been eligible for the program, and it becomes a very sticky issue with some of our customers like South Korea, Taiwan, and others, and in much of South America, we have had that same experience. It is a problem, but at the same time we recognize the fact that finding additional funding for an all across the board export enhancement program is an extremely difficult task.

We do feel that using the same amount of money in making the program all across the board is probably not feasible, because the consequent result would be that we would have much smaller bonuses to add to make the sales, consequently, our competitors would have an easier time underpricing us in foreign markets.

We would, obviously, like to see a program announced for the Soviet Union, realistically. We believe that it is a market where we could add a couple or 4 million tons of wheat sales from the United States very quickly if there were an export enhancement program for the Soviet Union. We could certainly use that in our export numbers.

Senator BURDICK. The testimony of Mr. Watson shook me a little bit where he said, "For two agonizing months this summer, the unthinkable happened. The United States experienced an agricultural trade deficit." Is that possible?

Mr. WILSON. We had a net deficit for 2 months this summer.

Senator BURDICK. Is that telling us something about the future?

Mr. WILSON. I certainly hope not. We are expending a lot of energy and a lot of producers' money to try to prevent that from becoming the normal pattern. We were having some very difficult times a year ago. The Export Enhancement Program was just beginning. Our competitors, primarily the Australians, the Canadians, as well as the Europeans, were playing very fast and loose with their pricing policy.

It was an extremely touchy situation. We are, I think, seeing this turn around over the last year. We are seeing some very significant increases in some of the other agricultural commodities. Mr. Quarles mentioned some of these earlier in his testimony concerning horticultural products.

We believe that we are on the way back. Certainly the impact of the lower dollar is beginning to show up, and it is having an impact. We certainly hope that it is not the normal pattern for years to come.

Senator BURDICK. Please provide me with the answer to the next question, if possible. Do you expect the U.S. wheat condition to improve over the next 3 or 4 years?

Mr. WILSON. We certainly think that we have bottomed out, and things are improving, although more slowly than we would like.

Senator BURDICK. Will FAS play a major role?

Mr. WILSON. It is our feeling, as has been expressed earlier, and Mr. Watson also mentioned it in his statement, that the package of programs in the 1985 farm bill have, for the most part, been very successful. The administration and the carrying out, the development and design of those programs is pretty much an all USDA–FAS show. So FAS continues to play a very key role.

It has had a lot of additional responsibilities, not only the TEA Program and export enhancement, but there has also been a lot of additional responsibility in terms of the credit programs that are tailor-made for individual markets, and these kinds of things take time and take expertise, and it has been done with a very limited number of people in the decisionmaking areas. It is going to be a real struggle for the FAS as things changed over the last year.

Senator BURDICK. If we are going to grow wheat, we had better sell it. I have always taken that position.

Senator Cochran.

Senator COCHRAN. I only have one question, Mr. Chairman. There are some who are suggesting that the farm bill needs to be reopened, provisions reexamined, and changes made. What is your reaction to these arguments? Are you in favor of reopening the farm bill, and do you see any need for substantive changes in the 1985 farm bill?

Mr. WATSON. I will have to answer as a farmer. As a farmer from North Dakota, I farm approximately 1,200 acres. The farm bill fits very neatly into my situation. and I think that generally the American wheat farmers would say, no, you should not reopen the farm bill. You should give it a chance to work, to solve the export problems. We think that it has some very good programs, and we would like to work with those programs for the next several years.

Senator COCHRAN. Thank you very much.

Senator BURDICK. I think the same thing. I think that it is the wrong thing to do, to reopen the farm bill. What I hear from North Dakota is that we shouldn't open it up, leave it alone. You would probably make things worse than they are.

Any other comments?

Mr. WATSON. No, other than to say, thank you very much, Senator.

Senator BURDICK. Thank you very much for being here.

[The statement follows:]

STATEMENT OF CECIL WATSON

Mr. Chairman, my name is Cecil Watson. I am Chairman of the North Dakota Wheat Commission and I'm here to represent the U.S. Agricultural Export Development Council (USAEDC), whose 72 members participate in the overseas market development program administered by the Foreign Agricultural Service (FAS).

Most of our members, also known as "cooperators" because they cooperate with FAS in building markets abroad, are producer and agribusiness organizations. Most are nonprofit, and they've spent 30 years establishing efficient market development networks in over 100 countries.

The Economic Environment

I would like to submit four propositions about the world agricultural economy. Proposition number one: There is no surplus of food in the world; there is a deficit of demand. Some people say other countries are growing more food and fiber and therefore don't need our farmers. I say the world does need U.S. agriculture. But what the world also needs very badly is a coordinated effort to build demand. Remember, demand equals need plus opportunity plus purchasing power. The need exists; it's up to us to complete the equation with opportunity and purchasing power, and then the profit equation for U.S. farmers will look a lot better.

Proposition number two: We are witnessing a mobility revolution in the world economy. Capital has become more mobile, with a number of consequences including a worldwide currency market and the fluctuating values that implies. Information is more mobile because of today's computer technologies, so that business decisions that might once have taken days must now be made in a split-second. And trade is also increasingly mobile today: there are more sources of supply, more closely competing products in some markets like vegetable oils, more opportunities for buyers and sellers to hedge transactions.

The third proposition is that commodity prices are too low by any rational standard ... and a sustained rise is going to require demand increases. It's going to require that purchasing power and opportunity be added into the equation I mentioned a moment ago. The reason for adding them isn't just altruism -- it's a recognition that we're only going to make money if we sell products, and we're only going to sell products if the world has the ability to buy them.

The fourth proposition, then, is that the United States must gear up: to boost demand through its macroeconomic, trade and aid policies; to compete in today's mobile world marketplace; and always with the aim of restoring profits to U.S. commodity producers. For the organizations in USAEDC, the bottom line isn't just moving more volume -- it's giving American producers a better chance to make a profit.

Competitiveness in Agricultural Markets

To become competitive the United States must consciously decide to compete -- and commit the resources necessary to do the job. Let's take just one example, the one I'm here to talk about: Foreign Market Development. In 1985, the money spent by the United States on agricultural market development was equal to 0.23% of its total agricultural export value. By contrast, Denmark spent 0.47% of its export value; Australia spent 0.85%; and New Zealand spent 1.55%. In short, the U.S. commitment is way down on the list. Competitiveness means a whole range of activities, not just market development. That's why we strongly urge you to provide greater resources for all FAS programs. After all, the Foreign Agricultural Service (FAS) is the frontline force in America's struggle to be more competitive in world agricultural markets.

- Agricultural Counselors/Attaches in U.S. embassies around the world gather vital market information, maintain contact with customers and competitors alike, and assist U.S. cooperator groups working in the area.
- The Food Security Act of 1985 created a number of new export programs, and already this has meant a greater workload for FAS personnel --- implementation of some programs, analytical work on others.
- As the new GATT round begins, it will be vital for FAS to have greater analytical capabilities, and the personnel resources to be a major player in the trade talks. We must ensure that, in contrast to previous rounds, agriculture is a top priority in the new talks. That means FAS needs the resources to respond quickly to negotiators' needs. Already the U.S. Trade Representative's office often calls on FAS and other USDA agencies for the information and background it needs.

For these reasons and many others, USAEDC believes this committee should show its commitment to competitiveness by giving FAS the budgetary resources it needs to begin a restoration of U.S. agricultural exports.

The Cooperator Program: Within the FAS budget, we especially urge you to increase the public commitment to the Cooperator program -- that public-private sector partnership that synergizes the resources of FAS with the marketing and technical know-how of private agricultural groups, with funding from farmers, agribusiness, and businesses overseas.

Market development is finding an opportunity ... meeting a need ... breaking down a trade barrier. It's what happens when a small family business in Italy comes up with a packaging innovation that lets it expand soybean oil sales in a market that traditionally prefers olive oil.

In Europe, a special Brand Incentive Program allowed European companies to promote their own brands of U.S. rice -- and U.S. rice sales to the European Community increased despite stiff competition from Thailand and the high value of the dollar.

In Taiwan, U.S. Wheat Associates was able to dissuade the government from signing a long-term wheat purchase agreement with Uruguay averting a potentially trade-stifling situation by taking advantage of its many years of building good relations in Taiwan.

I would remind you that --

- In 1986, the Cooperator program took a 4.3% cut under that year's Gramm-Rudman sequester.
- Although a weaker dollar is good for exports and we welcome it (indeed, we think it needs to fall more against some currencies), it obviously increases our operational costs overseas. The same number of dollars won't go as far when you have to spend them on goods, salaries and services priced in stronger D-marks or Yen.
- Finally, in many developing countries inflation continues at levels far higher than in the United States. That is, of course, reflected in our expenses.

For two agonizing months this summer, the unthinkable happened: the United States ran an agricultural trade deficit. If you look at USDA's weekly export sales report, you can see that some commodities --- not all --- may be about to turn the corner, with sales volume increasing once more. But it's been a rough few years since exports peaked and started downward. Our competitors have expanded production and sales at our expense. We've lost markets and it's going to take hard work to get them back.

U.S. producers are trying to keep their end of the bargain. They contribute money for overseas market development every time they sell a bushel of wheat ... a bale of cotton ... a ton of peanuts. It's important that the government hold up its end too - by funding market development and the entire FAS budget.

We should strengthen the USDA's Foreign Agricultural Service (FAS) the frontline troops of U.S. agricultural competitiveness by giving the agency the resources it needs to do its job. The Food Security Act created or expanded a number of export programs and gave FAS the responsibility of carrying them out, yet the agency has fewer staff positions than it did ten years ago. In the last five years 51 staff positions have been eliminated completely.

A modest rise in FAS's budget and personnel would pay dividends as export programs would be implemented more quickly.

CREDIT

The Administration has proposed a reduction in the GSM-102 credit guarantee program from $5 billion to $3 billion in FY 1988. While the program has not been fully utilized in the last two years, we feel it would be unwise and shortsighted to reduce the program as the U.S. competitiveness improves and credit needs increase

The GSM-103 intermediate credit program that was established at $500 million under the 1985 farm bill has been in operation for a short time, but it can be useful in helping bridge the gap between GSM-102 and more concessional credits. The Department of Agriculture should be encouraged to use this program, on a pilot basis, to promote improved storage and handling facilities that would increase overseas demand for U.S. agricultural products.

In the proposed FY 1988 budget, the Administration again proposes a five percent origination fee that would defeat the purpose of the credit guarantee program since our foreign customers would find it too expensive to use. The five percent origination fee would increase the cost to the buyer by an estimated additional 15 cents per bushel for wheat and 9 cents per bushel for feed grains. A 25,000 ton sale would cost an extra $137,625 for wheat and $88,200 for feed grains. Currently, the guarantee fee ranges from one-third to two-thirds of one percent. An increase to five percent would make it impossible for the United States to compete in world markets - especially on today's competitive markets.

Although again authorized in the 1985 Farm Bill, the Revolving Credit Fund has never been implemented. The concept still has the support of Cooperators and business leaders in the agricultural complex and we urge your Subcommittee to give careful consideration to the benefits which can be derived from such a revolving fund to promote commercial sales of American farm products.

P.L. 480

The P.L. 480 program funding is scheduled to be reduced from $1.463 billion to $1.387 billion in 1988 with $76.9 million of the reduction in the Title I/III program. Since the Title I/III program has been reduced in FY 1987, we would urge that the same level of funding be provided in FY 1988.

The Administration argues that additional commodities will be provided under the Section 416 program, and more commodities can be provided with the funding because of reduced prices. We would argue that further price reductions in commodities cannot be assured in FY 1988, and the same program levels are needed to meet the improved credit offerings of our competition.

The P.L. 480 and credit guarantee programs continue to be of major importance to our customers and to our producers in recovering U.S. export markets. These programs need to be made available on a timely basis. We also recommend that your Subcommittee specify that USDA have the primary role in allocating funds to all commodities and to make sure that all credit assistance is used to maximize market development efforts for U.S. agricultural products.

An Indispensable Partnership

Mr. Chairman, market development is not the be-all and end-all. It is not the sole, sufficient answer to U.S. agriculture's long and deep recession. But it is part of the answer, and an indispensable part. We must do far more -- from bringing down the value of the dollar to tough bargaining in the new GATT round -- but we can not do without market development.

Let me go back to those four economic propositions with which I began.

- In a world where demand is in deficit, we cannot do without the day-to-day demand-building efforts of FAS and the Cooperator groups.

- In a world where information and capital flow at the speed of light and trade is increasingly complex and competitive, we cannot do without the market know-how and information gathering capability of the Cooperators and FAS's world-wide attache network.

- In a world where commodity prices are depressed, and will remain so unless we can enhance demand worldwide, we cannot do without the 30 years of experience in market expansion that stand behind the Cooperator-FAS partnership.

- And in a world that requires a conscious, sustained gearing up to compete and increase market opportunities and purchasing power, the United States cannot afford to downgrade the front-line force of agricultural competitiveness, the trade wing of the Agriculture Department: the Foreign Agricultural Service and the private sector groups who are its partners.

When our group testified before this committee a year ago, we said "There are no guaranteed markets for U.S. agriculture." If anyone questioned that statement last year, the intervening months should have removed all doubt. But this year I'd like to make another statement, equally true: There are no markets closed to U.S. agriculture, if we make a commitment to competitiveness.

Competitiveness doesn't just mean price: It means delivering a quality product ... showing potential customers new uses and demonstrating how your product fits their needs ... working to break down trade and cultural barriers where those exist. In all these areas, the 72 groups I represent have a commitment to be competitive.

We ask you to support us in this request.

INDEX OF ATTACHMENTS

I. Summary of Recommendations

II. Historical Summary Value of U.S. Foreign Trade and Trade Balance

III. Fiscal Year Expenditures of Federal Funds and Cooperator Contribution and Total Agricultural Exports

IV. USDA and Cooperator Market Development Expenditures Expressed as a Percentage of Total Agricultural Exports

V. Agricultural Exports and Market Development Expenditures of the United States and its Principal Competing Countries.

[ATTACHMENT I]

SUMMARY OF RECOMMENDATIONS

1. An appropriation for the Foreign Agricultural Service of at least..............................$100 million

   The amount of $100 million consists of:

   $85.6 - the President's Budget Request
   + 0.9 - additional for FAS personnel
   + 2.4 - devaluation adjustment for FAS operations
   + 9.4 - to bring the cooperator program to its 1986 level
   + 2.1 - dollar devaluation adjustment for the cooperator program

2. GSM-102 credit guarantee program funding be maintained at the FY 1987 level, since a stronger U.S. dollar reduces foreign exchange risk and will thereby result in greater use of credit, and improved U.S. competitiveness creates a greater need for credit.

3. The GSM-103 credit guarantee program be used to finance customer infrastructure that will increase import potential, rather than to stretch out repayment periods for normal purchases.

4. Origination fees for USDA credit programs be prohibited, since they will eliminate use of the programs by customers.

5. Implementation of the Revolving Credit Fund, to maximize effective use of commercial credit programs.

6. The P.L. 480 Title I/III and Title II Programs funding be maintained at the current already reduced FY 1987 level.

7. Primary role in allocation of P.L. 480 funding be mandated to USDA in order to maximize program use for development of markets.

[ATTACHMENT II]

HISTORICAL SUMMARY
VALUE OF U.S. FOREIGN TRADE AND TRADE BALANCE

FISCAL YEARS 1970 - 1986

FISCAL YEAR	U.S. EXPORTS AGRICULTURAL	U.S. EXPORTS NON-AGRICULTURAL	U.S. EXPORTS TOTAL	U.S. EXPORTS % AGRICULTURAL OF TOTAL	U.S. IMPORTS AGRICULTURAL	U.S. IMPORTS NON-AGRICULTURAL	U.S. IMPORTS TOTAL	U.S. IMPORTS % AGRICULTURAL OF TOTAL	TRADE BALANCE AGRICULTURAL	TRADE BALANCE NON-AGRICULTURAL	TRADE BALANCE TOTAL
	Million Dollars			%	Million Dollars			%	Million Dollars		
1970	6,598	34,337	41,295	15	5,686	33,379	390,655	14	+1,272	+958	+2,230
1971	7,955	35,928	43,883	18	6,128	38,744	44,872	13	+1,827	-2,816	989
1972	8,242	36,633	44,875	18	5,936	45,926	51,862	11	+2,306	-9,293	-6,987
1973	14,984	47,759	62,743	23	7,737	57,521	65,258	11	+7,247	-9,672	-2,515
1974	21,559	69,423	90,982	23	10,031	81,995	92,026	10	+11,528	-12,572	-1,044
1975	21,817	83,178	104,995	20	9,435	89,251	98,686	9	+12,382	-6,073	+6,309
1976	22,742	89,047	111,789	20	10,492	103,743	114,235	9	+12,250	-14,696	-2,446
1977	23,974	95,144	119,118	20	13,357	129,061	142,418	9	+10,617	-33,917	-23,300
1978	27,289	104,270	131,559	20	13,886	152,095	165,981	8	+13,403	-47,825	-34,422
1979	31,979	135,639	167,618	19	16,186	177,424	193,610	8	+15,793	-41,785	-25,992
1980	40,481	169,753	210,234	19	17,276	219,305	236,581	7	+23,205	-49,552	-26,347
1981	43,788	185,415	229,203	19	17,218	237,469	254,687	6	+26,570	-52,054	-25,484
1982	39,094	176,311	215,405	18	15,346	233,488	248,834	6	+23,748	-57,177	-33,429
1983	34,769	159,373	194,142	17	16,271	229,438	245,709	6	+18,498	-70,065	-51,567
1984	38,027	170,014	208,041	18	18,916	295,088	314,004	6	+19,111	-125,074	-105,963
1985	31,201	179,236	210,437	14	19,740	313,722	333,463	5	+11,461	-134,486	-123,025
1986	26,325	176,613	202,939	13	20,875	342,855	363,730	5	+5,450	-166,242	-160,792

Source: 1970-1985 USDA, ERS. FATUS November/December 1986.

[ATTACHMENT III]

FISCAL YEAR EXPENDITURES OF FEDERAL FUNDS AND COOPERATOR CONTRIBUTION AND TOTAL AGRICULTURAL EXPORTS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	FEDERAL FUNDS					FUNDS DISTRIBUTION		MARKET DEVELOPMENT COSTS		
FISCAL YEAR	PROJECTS	FAS	TOTAL	COOPERATOR FUNDS	TOTAL FUNDS	FEDERAL	COOPERATOR	AGRICULTURAL EXPORTS	FEDERAL	COOPERATATOR
	$1,000					% of Total		$Million	% of Export Value	
1971	8,847	858	13,705	18,613	32,315	42	58	7,955	.11	.23
1972	10,054	1,730	11,874	20,605	32,389	36	64	8,242	.12	.25
1973	10,045	930	10,975	22,112	33,087	33	67	14,984	.07	.15
1974	10,234	658	10,892	23,342	34,234	32	68	21,559	.05	.11
*1975	11,739	830	12,659	26,997	39,566	32	68	21,817	.05	.12
1976	10,922	796	11,718	24,158	35,876	33	67	22,742	.05	.11
1977	11,719	798	12,517	29,420	41,937	30	70	23,974	.05	.12
1978	13,926	879	14,805	35,331	50,136	30	70	27,289	.05	.13
1979	16,709	963	17,672	39,660	57,332	30	70	31,979	.05	.12
1980	18,778	1,165	19,943	47,373	67,316	30	70	40,481	.05	.12
1981	20,195	1,014	21,209	51,502	72,711	29	71	43,788	.05	.12
1982	20,641	878	21,519	54,804	76,323	28	72	39,094	.06	.14
1983	23,373	869	24,242	65,849	90,091	27	73	34,769	.07	.19
1984	27,429	1,501	28,930	61,693	90,623	32	68	38,027	.08	.16
1985	31,073	1,088	32,161	72,839	105,000	31	69	31,201	.10	.23
1986	41,613	2,149	43,762	76,824 (Est.)	120,586	36	64	26,325	.17	.29

* Cover 15 month period.

FOOTNOTES:

(1)	FAS Expenditures for Cooperator Projects.
(2)	FAS Expenditures for own projects.
(3)	Column (1) + (2).
(4)	Cooperator expenditures from own and related funds including foreign.
(5)	Total expenditures for foreign market development.
(6) & (7)	Share of total expenditures by source.
(8)	Value of total U.S. exports of agricultural commodities.
(9) & (10)	Market development costs as percent of value of total exports.

NOTE: If forest products are included, the agricultural exports for 1982 would total $41.9 billion, and the Federal and cooperator market development costs would be .05% and .13% respectively; 1983 would total $37.6 billion, and the Federal and cooperator market development costs would be .06% and .16%, respectively; 1984 would total $40.7 billion and the Federal and cooperator market development cost would be .07% and .15% respectively; 1985 would total $33.8 billion and the Federal and cooperator market development cost would be .10% and .18% respectively and 1986 would total $29.2 billion and the Federal and cooperator market development cost would be .15% and .26% respectively.

[ATTACHMENT IV]

USDA AND COOPERATOR MARKET DEVELOPMENT EXPENDITURES EXPRESSED AS A PERCENTAGE OF TOTAL AGRICULTURAL EXPORTS

FISCAL YEARS 1971 - 1986

FISCAL YEAR	EXPORTS ($ billions)	MARKET DEVELOPMENT 1/ ($ thousands)	PERCENT OF EXPORTS
1971	8.0	20,569	0.26
1972	8.2	18,785	0.23
1973	15.0	18,536	0.12
1974	21.6	18,600	0.09
1975	21.8	212,656	0.10
1976	22.7	21,593	0.10
1977	24.0	25,069	0.10
1978	27.3	30,000	0.11
1979	32.0	33,935	0.11
1980	40.5	39,748	0.10
1981	43.8	42,344	0.10
1982	39.1	49,594	0.13
1983	34.8	54,448	0.16
1984	38.0	59,596	0.16
1985	31.2	67,800	0.22
1986 (Estimate)	26.3	80,933	0.31

1/ Excludes Foreign Third Party Contributions.

SOURCE: FAS/MPS: 2/19/87
(1510P pg 36)

[ATTACHMENT V]

Table 1. Agricultural Exports and Market Development Expenditures of the United States and its Principal Competing Countries 1/

1983-85

COUNTRY	REVISED 1983			REVISED 1984			ESTIMATED 1985		
	EXPORTS	MARKET DEVELOPMENT	PERCENT OF EXPORTS	EXPORTS	MARKET DEVELOPMENT	PERCENT OF EXPORTS	EXPORTS	MARKET DEVELOPMENT	PERCENT OF EXPORTS
	(Billion)	(Million)	Pct.	(Billion)	(Million)	Pct.	(Billion)	(Million)	Pct.
Australia 2/	US$ 7.99 A$ 8.50	65.75 69.94	.82	9.17 10.10	79.33 87.36	.86	7.92 10.45	67.30 88.84	.85
Canada 3/	US$ 7.71 C$ 9.51	15.54 19.26	.20	7.98 10.31	11.08 14.65	.14	6.98 9.60	11.08 15.25	.16
Denmark 4/	US$ 3.73 DKr 34.50	20.17 186.70	.54	3.98 40.92	19.59 201.50	.49	4.12 43.53	19.52 206.30	.47
France 4/	US$ 15.63 FF 120.00	27.94 214.50	.18	15.86 137.60	25.65 222.50	.16	17.31 154.70	32.08 286.70	.19
Israel 3/ 5/	US$ .70	10.60	1.51	.69	N.A		N.A	9.60	
Netherlands 4/	US$ 15.02 DFl 43.30	35.45 102.20	.24	15.18 48.30	34.60 110.10	.23	15.39 50.80	33.11 109.30	.22
New Zealand 6/	US$ 3.50 NZ$ 5.20	43.06 64.80	1.25	3.74 5.70	62.52 95.40	1.67	3.68 7.75	56.99 119.85	1.55
South Africa 4/	US$ 1.56 R 1.73	13.23 14.63	.85	1.25 1.84	12.98 19.10	1.04	.99 2.20	12.34 27.29	1.24
TOTAL	$55.84	231.74	.42	$57.85	245.75	.42	$56.39	$242.02	.42
UNITED STATES 8/	$34.80	$57.29	.16	$38.00	$62.30	.17	$31.20	$70.96	.23

1/ Exchange rate source: Treasury Reporting Rates of Exchange, Department of the Treasury Fiscal Service, Bureau of Government Financial Operations.

2/ July-June fiscal year data.

3/ Export data based on calendar year, market development expenditures on April - March fiscal year.

4/ Calendar year data.

5/ Israeli data is reported in U.S. dollars, the unit of account prevalent in Israel for reporting market development expenditures and exports. To convert these figures to Israeli Shekels for comparison's sake would not be meaningful due to the Shekel's steady devaluation in relation to the U.S. dollar. Data for CY 1985 were not available at the time of this report.

6/ Export data based on calendar year for 1982 and 1983, and on July-June Fiscal Year for 1984. Market development expenditures are aggregated over various fiscal years.

7/ Does not include trade show budget for 1983 -- figures are not available.

8/ October-September fiscal year data. Source for export data is Foreign Agricultural Trade of the United States (FATUS). Market development data includes FAS funds, U.S. cooperator contributions and Agricultural Trade Offices.

The Humane Society of the United States

STATEMENT OF BARBARA CASSIDY, DIRECTOR, ANIMAL SHELTERING AND CONTROL

ACCOMPANIED BY MARTHA HAMBY, DIRECTOR OF LEGISLATIVE ACTIVITIES

Senator BURDICK. Our next witness is Barbara Cassidy, director, animal sheltering and control, The Humane Society of the United States.

Ms. CASSIDY. Good morning, Mr. Chairman.

I am Barbara Cassidy, director for animal shelter and control for The Humane Society of the United States. I have with me Martha Hamby, director of legislative activities for the HSUS.

On behalf of our more than 550,000 constituents, many of whom we share with you, I appreciate the opportunity to present the HSUS concerns about continued, adequate funding for enforcement of the Animal Welfare Act, which is administered by the Animal and Plant Health Inspection Service, APHIS.

Without an adequately funded Animal Welfare Act, millions of animals kept in laboratories, zoos, circuses, and puppy supply mills would have no protection. The Animal Welfare Act, originally passed in 1966 and subsequently amended, requires proper food, water, and housing to those animals, as well as to animals sold for research purposes by animal dealers.

Since fiscal year 1983, the administration's budget has recommended either major cuts or, as with the fiscal years 1986 and 1987 proposed budgets, complete elimination of the program. In its wisdom and compassion, the subcommittee has responded not only by restoring funding, but by granting an increase of $1 million for the last fiscal year.

APHIS has been charged by Congress with vital inspections that no other arm of government is authorized to do. The HSUS has continuing concerns about the animals protected by the act. We consider its continued ongoing and uninterrupted enforcement critical.

If the administration has its way, that is, if APHIS funding is cut by $1 million, the program of enforcement will be reduced by 50 percent. This means that untold suffering for millions of animals that are supposed to be protected would not be rectified for those animals.

Our concerns are about laboratory animals. The federal government spends billions of dollars to fund biomedical research. It is an outrage that this same government should eliminate the paltry sums budgeted last year for inspections of laboratory animals in research facilities should be reduced or eliminated.

Our concerns also cover zoo and circus animals. Under the act, APHIS is also charged with the licensing and inspection of almost 1,400 licensed animal exhibits across the United States. This group includes zoos, circuses, traveling shows, and aquariums, most of which keep a large number and variety of wild animals, and these animals have special needs.

Given the unusual circumstances of removing animals from their natural environment, as the large number of existing exhibitors do, uniform federal standards and inspections are vital to the well being of these wild animals.

Puppy mills, which kennels that mass-produce dogs for pet shops are called, have often violated federal standards of animal care. Since 1970, the Animal Welfare Act has required commercial breeders who sell puppies to the pet industry to be licensed and regulated by APHIS. APHIS, with the mandate of the Animal Welfare Act, requires their approximately 2,500 licensed dealers to meet humane standards of care for their dogs. Continued APHIS inspections are vital in order to maintain a minimum standard of care for puppies in this country.

Dog and cockfighting is also one of our concerns. Dog and cockfighting are two cruel blood sports that involve pitting two dogs or two roosters against one another in a small enclosure. In 1976, the Animal Welfare Act was amended to prohibit these alleged sports. These provisions, however, have never been enforced due to a consistent lack of adequate funding. Without enforcement the brutality continues and becomes more widespread.

APHIS' enforcement of the Animal Welfare Act also requires licensing and registration of animal dealers. Animal dealers buy and sell dogs and cats for biomedical research and testing. They often buy the dogs and cats from animal shelters, a practice known as pound seizure. The Humane Society of the United States is currently working to eliminate pound seizure because shelters are not warehouses for animal dealers.

APHIS has been instrumental in the investigation of research animal dealers who maintain animals in substandard conditions or obtain them illegally. APHIS' continued presence is crucial to the elimination of animal suffering at the hands of these dealers.

The Humane Society of the United States requests that this committee appropriate $10 million for the proper enforcement of the Animal Welfare Act programs. We are recommending that $750,000 be directed to fund the laboratory animal welfare information service established at the National Agricultural Library, in cooperation with the National Library of Medicine.

We greatly appreciate your past help in responding to the needs of the animals protected under the Animal Welfare Act. We hope you will continue in kind.

Thank you very much for the opportunity to present my concerns.

Senator BURDICK. What is your position on funding the Animal Damage Control Program?

Ms. HAMBY. Mr. Chairman, the Humane Society is opposed to the expenditure of funds from the $10 million budgeted this year for animal damage control because of the cruel methods used. Trapping and poisoning, and the cruel ways that the farmers use are unnecessary, and there could be some alternatives.

Senator BURDICK. Are dog and cockfighting illegal in the United States?

Ms. HAMBY. Yes, they are. There are about 20 some odd states that have enacted state level felony legislation, but it is not enforced. The penalties are so low, and the fines that are incurred are simply considered a cost of doing business.

Senator BURDICK. Can private citizens attend these activities?

Ms. HAMBY. Yes.

Senator BURDICK. Has there been legal action to prevent these activities?

Ms. HAMBY. I am sorry, I can't answer that question. We will have to supply it for the record. I am not sure of the answer, and I would have to get it for you.

Senator BURDICK. Thank you.

Thank you very much for your statement.

Ms. CASSIDY. Thank you very much.

[The statement follows:]

STATEMENT OF BARBARA CASSIDY

MR. CHAIRMAN AND MEMBERS OF THIS SUBCOMMITTEE, I am Barbara Cassidy, Director for Animal Sheltering and Control for The Humane Society of the United States (HSUS), the nation's largest animal-protection organization. On behalf of our more than 550,000 constituents, many of whom we share with you, I appreciate the opportunity to present HSUS concerns about continued, adequate funding for enforcement of the Animal Welfare Act, which is administered by the Animal and Plant Health Inspection Service (APHIS).

Without an adequately funded Animal Welfare Act, millions of animals kept in laboratories, zoos, circuses, and puppy mills would have no protection. The Animal Welfare Act, originally passed in 1966 and subsequently amended, requires proper food, water, and housing to those animals, as well as to animals sold for research purposes by animal dealers. In December, 1985, important new provisions were added to The Animal Welfare Act, affording better protection for laboratory animals. Even though The Animal Welfare Act is vital to the surivival of millions of animals, the Office of Management and Budget (OMB) has recommended that APHIS' budget for enforcement of the Animal Welfare Act be cut by one million dollars.

Funding for the Animal Welfare Act is a perennially afflicted item in the President's budget. Since FY 83, the Administration budget has recommended either major cuts or—as with the FY 86 and 87 proposed budgets—complete elimination of the program. In its wisdom and compassion, the subcommittee has responded not only by restoring funding, but by granting an increase of one million dollars for the last fiscal year. For 1988, however, the administration has sent you a budget asking for a one million dollar cut in Animal Welfare Act funding.

APHIS has been charged by Congress with vital inspections that no other arm of government is authorized to do. The HSUS has continuing concerns about the animals protected by the Act; we consider its continued ongoing and uninterrupted enforcement critical. If the Administration has its way, that is, if APHIS' funding is cut by one million dollars, the program of enforcement will be reduced by 50 percent.

The Humane Society of the United States has the following concerns about the welfare of animals, should this funding not be restored.

1. Laboratory animals: The original Animal Welfare Act was enacted to protect the millions of animals used in research. The federal government spends billions of dollars to fund biomedical research. It is an outrage that this same government should eliminate the paltry sums budgeted last year for inspections of lab animals in research facilities. Since most state laws exempt research, teaching, and testing from their cruelty statutes, the Animal Welfare Act affords the only uniform, legal protection. Because the Animal Welfare Act is the only protection that animals have, it is fitting that this subcommittee appropriate enough money for APHIS to carry out its mandate.

2. Zoo and circus animals: Under the Act, APHIS is also charged with licensing and inspecting the 1415 licensed animal exhibits across the nation. This group includes zoos, circuses, traveling shows, and aquariums, most of which keep a large number and wide variety of wild animals. Our inspectors regularly encounter situations where even the most basic needs of animals are not met. The most common violations are found in the areas of shelter, sanitation, diet, cage size, and veterinary care. In fact, APHIS has been summoned to intervene in cases of physical abuse.

The diverse species exhibited at zoos and circuses have special needs. Given the unusual circumstance of removing animals from their natural environment, as the large number of existing exhitors, uniform federal standards and inspections are vital to the well-being of these wild animals.

3. Puppy mills: Kennels that mass-produce dogs for pet shops are called puppy mills. Puppy mill operators often violate federal standards of animal care. Many deprive puppies of adequate shelter, sufficient food and water, and veterinary care. The filthy conditions under which some breeders keep their animals are inexcusable. Since 1970, the Animal Welfare Act has required commercial breeders who sell puppies to the pet industry to be licensed and regulated by APHIS. APHIS, with the mandate of the Animal Welfare Act, requires their licensed dealers to meet humane standards of care for their dogs. Continued APHIS inspections are vital in order to maintain a minimum standard of care for puppies in this country.

4. Dog- and Cockfighting: Dog- and cockfighting are two cruel blood sports that involve pitting two dogs or two roosters against one another in a small enclosure. Cheering spectators place bets on which animal will survive. In 1976, the Animal Welfare Act was amended to prohibit these alleged "sports." These provisions, however, have never been enforced due to a consistent lack of adequate funding.

5. Animal dealers: APHIS' enforcement of the Animal Welfare Act also requires licensing and registration of animal dealers. Animal dealers buy and sell dogs and cats for biomedical research and testing. They often buy the dogs and cats from animal shelters, a practice known as pound seizure. The Humane Society of the United States is currently working to eliminate pound seizure because shelters are not warehouses for animal dealers. Stolen pets, flea markets and auctions are other sources of animals for dealers. APHIS has been instrumental in the investigating of research animal dealers who maintain their animals in substandard conditions or obtain them illegally. APHIS's continued presence is crucial to the elimination of animal suffering at the hands of these dealers.

In short, the money you have appropriated to enforce the Animal Welfare Act has been money well spent. By restoring the funding the Administration has cut each year since FY 83, you have improved the living conditions for literally millions of animals.

This year, we ask for your help again. In FY 85 and 86, USDA reprogrammed funds to give APHIS approximately six million dollars for animal welfare activities. This money, however, is not enough to execute the duties which I just outlined. The Humane Society of the United States requests that this committee appropriate 10 million dollars for the proper enforcement of The Animal Welfare Act programs. Such an increase would ensure that facilities covered by the Animal Welfare Act are adequately and regularly inspected, that inspectors are thoroughly trained, and that APHIS has the management and administrative resources to carry out its duties. We are asking that $750,000 be directed to fund the laboratory animal welfare information service established at the National Agriculture Library, in cooperation with the National Library of Medicine.

We appreciate your past help in responding to the needs of the animals protected under the Animal Welfare Act. We hope you will continue in kind.

SOCIETY FOR ANIMAL PROTECTION LEGISLATION

STATEMENT OF CHRISTINE STEVENS, SECRETARY

ACCOMPANIED BY CATHY LISS

Senator BURDICK. Our next witness is Ms. Christine Stevens, Society for Animal Protective Legislation.

Ms. STEVENS. Thank you, Mr. Chairman.

I have with me Cathy Liss, who has some photographs from her recent visit to the Denver Wildlife Research Center, which might be of interest to you as you ask your questions. However, I would like to start my testimony with two different aspects.

First, the increased responsibilities of veterinary services under the improved standards for laboratory animals amendments to the Animal Welfare Act; second, for the information service at the National Agricultural Library established by these amendments; and third, for proper operation of the Denver Wildlife Research Center, which was transferred to the Department of Agriculture from Interior with the responsibility for animal damage control.

The substantial appropriation that we hope to see is the appropriation to enforce the standards for laboratory animals. A joint letter requesting increased funding was submitted to you last year by the humane organizations and scientific groups.

We think that it is essential to have sufficient funds to effectively enforce the law. I have a letter here which again shows a broad spectrum of people who want to see $10 million appropriated in fiscal year 1988 to enforce the Animal Welfare Act.

The act now requires that each registered research facility be visited at least once a year, and that if deficiencies or deviations from the standards are found, the veterinary inspectors must conduct followup inspections until the institution is in compliance with the standards. In many instances, new deficiencies or deviations are found on a return visit. Some habitual violators have had to undergo long series of inspections to bring them up to the mark.

The President's budget proposal for enforcement of the Animal Welfare Act would not, unfortunately, provide for such inspections. Unless Congress appropriates additional funds it would be impossible for APHIS to make these crucial followup inspections.

The amendments, as you know, went into effect on December 23 of last year, but unforeseen delays prevented the proposed regulations, which had been prepared in a timely fashion by veterinary services, from being published in the Federal Register until March 31. Training of the inspectors to carry out their increased duties is of great importance, as both animal welfare and scientific groups agree, and adequately funded training sessions need to go forward promptly now.

Good recordkeeping is basic to the enforcement of the act, and additional computerization is needed.

There are only six animal care specialists for the entire United States. Their number should be doubled so that inspectors can be given expert assistance with difficult cases and so that urgent problems can always be dealt with by experienced people. The increased duties under the ISLA amendments make this a priority.

We, therefore, respectfully urge that the $10 million be appropriated to enforce the Animal Welfare Act for fiscal year 1988.

Now I would like to turn, if I may, to the National Agricultural Library Information Service. Last year, this subcommittee funded ALIS at a level of $750,000, but there is no request whatsoever for that this year. We request that a similar sum be appropriated for fiscal year 1988.

This informational work, which has just begun, can really save the government a lot of money as the work progresses.

Now I would like to talk about our third concern, the Wildlife Research Center, which has been transferred to Agriculture from Interior. Unfortunately, this center does not meet the standards set by the Secretary of Agriculture for such facilities nationwide.

Agriculture has inherited a laboratory of the kind that Congress has directed the agency to clean up by enforcing minimum standards. An inspection conducted by APHIS in March of this year revealed deficiencies in veterinary care, feeding, watering, sanitation, cleaning, housekeeping, pest control, structural strength, storage of food and bedding, ventilation, and drainage. We have a copy of that report.

The rest of my testimony is a report which Cathy Liss made of her visit, so I will ask her to briefly summarize that.

Ms. Liss. The Denver research facility has serious problems with wild rabbits, rodents, and insects, and quite a number of other defects.

There are two steam cleaners, but neither one is functioning, for cleaning up the cages.

There is inadequate ventilation, heat, and cooling. This is an urgent need.

The rooms have been prearranged in a very slipshod manner. Floors, walls, and ceilings are not properly finished as well. The facility is in a serious state of disrepair. Some areas have been abandoned because of this, and others have been patched together in very haphazard manner.

Rather than further patching in an attempt to meet the Animal Welfare Act standards, it would be more prudent to construct new animal quarters. This should be a high priority.

Ms. Stevens. Let me just add that if funds are hard to get for this purpose, some of the low-grade work that is being done at the center might well be cut in order to provide the necessary funds for physical plant and proper maintenance of it.

Thank you.

Senator Burdick. Last year, you requested just over $6.5 million for animal welfare. This year, you are requesting $10 million. Why did you increase your request?

Ms. Stevens. It appears that it just can't be done for the amount that was appropriated last year. Although I want to repeat that we are very grateful for that increase, because last year the request was zero, and went up to over $6 million. This year, the request is for $4 million, and we would like to see it go up to $10 million. The increase that we are asking for is actually less than last year, but it is an increase.

It is very important because the Department now has gotten hold of what we think needs to be done. We have waited for many years for this to happen, Mr. Chairman. It has been very, very difficult. It is something that we have worked on step by step by step. At last, some extremely well prepared regulations have been published.

It really should have happened when the law was passed in 1966, but it has taken all this time to get to the point at which animals can truly be protected, and that is why we want to see the increase in the funding.

Senator Burdick. We have been directed by the Gramm-Rudman law to reduce the budget. Where do we cut?

Ms. Stevens. First, I do suggest that you cut the whole $10 million out of the animal damage control. We have considered requesting a total cut, but it has been reduced, and reduced while maintaining much greater efficiency than it ever had under Interior. Interior did a very, very poor job. You could readily get a very substantial amount of money from that program, and yet have control.

Mercy techniques, fertility control, these things have not been properly examined, and they could be at a much lower figure, and you would have the money that you need to put into enforcement of the Animal Welfare Act standards.

Senator BURDICK. This is a problem that we have.

Ms. STEVENS. Mr. Chairman, I am very sympathetic to your problem. I can't tell you how much I realize how difficult it is.

Senator BURDICK. I am concerned about the condition of the Denver Animal Damage Control Center. Do you know if they are cleaning up as a result of the APHIS inspection?

Ms. LISS. They intend to, however, they are going to need a substantial sum of money in order to do it. They have tried some patch jobs which don't last very long, and are not really adequate.

Senator BURDICK. Thank you very much.

Ms. STEVENS. Thank you.

[The statement follows:]

STATEMENT OF CHRISTINE STEVENS

On behalf of the Society for Animal Protective Legislation, I respectfully submit requests for funding 1) of increased responsibilities of Veterinary Services under the Improved Standards for Laboratory Animals amendments to the Animal Welfare Act, 2) for the information service at the National Agricultural Library established by these amendments, and 3) for proper operation of the Denver Wildlife Research Center which was transferred to the Department of Agriculture from Interior with the responsibility for Animal Damage Control.

Enforcement of Improved Standards for Laboratory Animals (ISLA)

Animal welfare organizations and biomedical research organizations agree that funding sufficient to administer the Animal Welfare Act efficiently and effectively is essential. A joint letter requesting increased funding was submitted to you last year, and this year again a broad spectrum of groups are in agreement. We believe that the program should be funded at a level of $10 million, and we submit a letter to that effect.

The Act now requires that each registered research facility be visited at least once a year, and that if deficiencies or deviations from the Standards are found, the veterinary inspectors must conduct follow-up inspections until the institution is in compliance with the Standards. In many instances, new deficiencies or deviations are found on a return visit. Some habitual violators have had to undergo a long series of inspections to bring them up to the mark. The President's Budget proposal for enforcement of the Animal Welfare Act would not, unfortunately, provide for such inspections. Unless Congress appropriates additional funds it would be impossible for APHIS to make these crucial follow-up inspections.

The ISLA amendments went into effect December 23, 1986, but a series of unforeseen delays prevented the proposed regulations which had been prepared by Veterinary Services from being published in The Federal Register until March 31. Training of the inspectors to carry out their increased duties is of great importance, as both animal welfare and scientific groups agree, and adequately funded training sessions need to go forward promptly now.

Good record keeping is basic to the enforcement of the Act, and additional computerization is needed.

There are only six Animal Care Specialists for the entire United States. Their number should be doubled so that inspectors can be given expert assistance with difficult cases and so that urgent problems can always be dealt with by experienced people. The increased duties under the ISLA amendments make this a priority.

We therefore respectfully urge that $10 million be appropriated to enforce the Animal Welfare Act for FY 88.

National Agricultural Library Information Service

This subcommittee's recommendation of an appropriation of $750,000 for FY 87 to promote an information service at the National Agricultural Library as mandated by the Improved Standards for Laboratory Animals amendments was much appreciated. We request that a similar sum be appropriated for FY 88. The President's Budget regrettably includes no funds for this work which has not yet had an opportunity to realize its potential to provide information on employee training, on improved methods to reduce or replace animal use and minimize pain and distress to animals, and to prevent unintended duplication of animal experiments.

This informational work can be highly effective in reducing costs both for government and private sector institutions at the same time that it prevents unnecessary animal suffering. It should be funded in FY 88.

Denver Wildlife Research Center

The decision by Congress to transfer Animal Damage Control from Interior to Agriculture means that the Denver Wildlife Research Center is now a USDA research facility. It does not, however, meet the Standards set by the Secretary of Agriculture for such facilities nationwide. Agriculture has inherited a laboratory of the kind Congress has directed the agency to clean up by enforcing minimum Standards. An inspection conducted by APHIS in March of this year revealed deficiencies in veterinary care, feeding, watering, sanitation, cleaning, housekeeping, pest control, structural strength, storage of food and bedding, ventilation and drainage. Copies of this report are attached.

A representative of the Society for Animal Protective Legislation visited the Center March 10, 1987 and submitted the following:

> I visited all of the buildings which are currently housing research animals as well as those which have housed animals in the past and may do so in the future. Buildings visited were #16, the main administrative/research building, the bird complex consisting of buildings 14, 13, and 2, the predator research area, building 83-K and grounds, and the small mammal buildings 45, 95-A, 92, and 90-C.
>
> There is a serious pest control problem throughout the Denver Research Center. Wild rabbits were hopping in and out of buildings and rodent holes and trails were evident in many places in the snow. Most rooms were not rodent proof and nearly all were insect infested. Bugs were found in various feed bins.
>
> There are two steam cleaners; both are non-functional because of inadequate pressure. I was informed that GSA is responsible for this maintenance; this problem should be corrected immediately as there is no facility available for the proper sanitization of cages and other equipment.

In addition, GSA is not providing prompt assistance with other maintenance needs. When I was in the library later in the week there was a leak in the ceiling and a number of books were destroyed by water damage. If this sort of problem occurred in an animal room it could be detrimental to them. If possible, an alternate system for maintenance of the animal buildings should be established.

Many rooms do not have adequate ventilation, heating and/or cooling. In some rooms the windows were blackened and window air conditioners were installed in attempt to deal with the problem.

The Center has 2 consulting veterinarians rather than a staff veterinarian. Veterinary services are not being utilized as often as they should be. Animals are not being routinely checked upon arrival, and investigators are assuming total responsibility for their animals and are reluctant to call upon veterinarians for assistance.

Rooms have been rearranged in a slipshod manner. Floors, walls and ceilings are not properly finished/sealed. Remains from abandoned pens have been left in disarray. Carcasses in the freezers were not properly identified or bagged. Floors and walls had peeling paint. Numerous dirty cages. No proper storage areas for clean, unused equipment. Open feed bags. Rusty and/or dirty feed and water containers. Drainage problems including clogged drains, lack of drain covers and pooling water.

A number of dirty, unused cages had been adapted for holding prairie dogs by the attachment of wire mesh to the front. Heavy gauge wire was used, leaving loose, sharp ends, hazardous to the animals.

One room was used for both cage storage and current housing of prairie dogs. A number of the animals had hair loss due to an unintended vitamin C deficiency. These animals were pulled from the research project they had been assigned to, and are now given cabbage and kale to prevent this deficiency. They are now being used for a strychnine probe.

Most of the facilities are in a serious state of disrepair, some areas have been abandoned, others have been patched together in a very haphazard manner. Rather than further patching in an attempt to meet Animal Welfare Act Standards, It would be more prudent to construct new animal quarters. This should be a high priority.

There is an urgent need for centralization of operations at the Denver Wildlife Research Center. For example, animal orders are not placed through any one person or office.

To bring the Center's laboratories up to minimum standards, it is estimated that $779,000 is needed. A breakdown of this estimate is attached.

We believe that the bad conditions for animals and deterioration of the physical plant is also reflected in the poor quality of much of the scientific work conducted at the Denver Wildlife Research Center. The Subcommittee may wish to recommend judicious pruning of funds for low grade research, and we would support such action. However, it is essential that the Center's operation be brought into compliance with the standards of the Animal Welfare Act. We respectfully urge appropriation of $779,000 for this purpose.

NATIONAL ASSOCIATION OF BIOMEDICAL RESEARCH

STATEMENT OF FRANKIE TRULL, EXECUTIVE DIRECTOR

Senator BURDICK. Ms. Frankie Trull, executive director, National Association of Biomedical Research.

Ms. TRULL. Thank you, Mr. Chairman.

I am Frankie Trull, executive director of the National Association for Biomedical Research, an organization dedicated solely to the scientific community's interest in the continued humane and responsible use of research animals to improve the health of people and animals.

I appreciate the opportunity to come before you and the subcommittee again to seek support for maintaining and improving the U.S. Department of Agriculture's Animal and Plant Health Inspection Service's animal welfare program. As a result of the subcommittee's actions over the last 5 years, this important program has been preserved. For this, we are most grateful.

Since this administration has repeatedly attempted to abolish this program, last year the National Association for Biomedical Research went directly to the Office of Management and Budget with our plea for adequate funds for federal animal welfare inspection. Unfortunately, we had only limited success.

While the administration did not recommend total elimination of the program in fiscal year 1988, it has requested more than a 20-percent reduction in funding, an amount which, according to the agency, will, in fact, cut the number of animal welfare inspections performed by one-half.

I do not wish to take a great deal of the subcommittee's time this morning, especially for a problem with which you are well aware. However, there is much at stake here for the future of research, for the welfare of laboratory animals and for the reputation of USDA.

APHIS has the responsibility—the congressionally mandated responsibility under the Animal Welfare Act—to inspect more than 3,700 animal dealers, 1,400 exhibitors, 1,200 research facilities, and 300 intermediate handlers as well as to conduct thousands of airport inspections. In fiscal year 1986, APHIS made well over 18,000 inspections pursuant to the Animal Welfare Act.

While the agency has inspection authority for many other critical agricultural programs affecting the health of people, animals, and our economy, I doubt that any of these programs attracts more public attention than inspections related to the care and treatment of laboratory animals.

As you know, there is a small but very vocal minority of people who oppose the use of animals in research. This minority uses almost any means to gain media coverage, ranging from demonstrations and rallies to research facility break-ins, theft, vandalism, and personal threat against researchers. Because of allegations of abuse by these extremists, a very concerned public is led to question how laboratory animals are treated in research. The answer Congress has given to these questions and concerns is the Animal Welfare Act.

First passed in 1966, the act has been strengthened and clarified in a series of amendments, most recently effective December 1986. Needless to say, the research community as well as responsible animal welfare groups depend on consistent, careful enforcement of the act to maintain public confidence in research which, of necessity, relies on laboratory animals.

Inadequate funding of the APHIS inspection program could seriously impede research and, ultimately, jeopardize the future health and well-being of the nation. If faith and trust in the current enforcement program is lost, there will be increasing pressure to curtail or possibly eliminate the use of animal models in biomedical research and testing. Congress has wisely recognized the essential federal role in ensuring that vital research is continued. What remains to be provided are the necessary resources required by APHIS to do the job.

Currently, APHIS devotes less than 2 percent of its total budget to Animal Welfare Act duties. This is less than $6 million to inspect the 6,500 entities I mentioned previously. APHIS has not received an increase in funding since fiscal year 1981. Frankly, we in the research community have never understood how the agency has managed. Perhaps the answer is, not as well as it should.

Given the greatly expanded duties assigned to the agency in the recent Animal Welfare Act amendments, we believe a reasonable increase is now in order. Animal welfare and scientific organizations agree that $10 million could provide the high quality inspection program that the public expects and Congress has already mandated.

The recommended increase would ensure that, as required by law, all covered facilities would be adequately and regularly inspected, that inspectors are thoroughly trained, which has not been possible with such limited funding, and that APHIS has the management and administration resources to carry out its current and new responsibilities.

Mr. Chairman, I have a letter to you in support of this recommendation from approximately 100 scientific and animal protection organizations which I will submit for the record.

Thank you once again for the opportunity to appear today.

Senator BURDICK. Thank you.

You say that you represent institutional members only. Would you describe to the committee the type of facilities that do not necessarily subscribe to your association?

Ms. TRULL. Our members are medical schools, veterinary schools, teaching hospitals, academic and professional societies, pharmaceutical and other research intensive companies, contract testing laboratories.

Senator BURDICK. We have heard rumors that laboratories are mistreating animals. Where does all that come from, do you know?

Ms. TRULL. As you may be aware, there are several well-publicized cases of noncompliance with the Animal Welfare Act, which is one of the reasons we feel strongly that it is going to require additional dollars to ensure a strong enforcement program.

We also firmly believe and our survey shows that the vast majority of laboratory animals used in biomedical research are treated humanely.

In answer to the question that you haven't asked me yet, but which you asked of Ms. Stevens on why we think we need a significant increase in appropriation is that with the authorization process, a major broadening of APHIS' mandate regarding enforcement of the Animal Welfare Act. It is very difficult to carry out that responsibility without additional expenditures, which puts all of us in a difficult situation.

Senator BURDICK. Thank you very much.

[The statement follows:]

STATEMENT OF FRANKIE L. TRULL

The National Association for Biomedical Research was established in 1979 and consolidated in 1985 with the National Society for Medical Research.

NABR has institutional members only. They include more than 300 universities, medical and veterinary schools, teaching hospitals, academic and professional societies, pharmaceutical and other research-intensive companies. NABR members across the country are engaged in or directly interested in life-saving research, safety testing and education which of necessity requires the use of animals. All members are committed to the humane care and responsible use of these laboratory animals as well as to the development and use of valid alternatives to animal models wherever possible.

I am Frankie L. Trull, Executive Director of the National Association for Biomedical Research, an organization dedicated soley to the scientific community's interest in the continued humane and responsible use of research animals to improve the health of people and animals.

I appreciate the opportunity to come before you and the Subcommittee again to seek your support for maintaining and improving the U. S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) animal welfare program. As a result of the Subcommittee's actions over the last five years this important program has been preserved. For this we are most grateful.

Since this Administration has repeatedly attempted to abolish this program, last year the National Association for Biomedical Research went directly to the Office of Management and Budget with our plea for adequate funds for federal animal welfare inspections. Unfortunately, we had only limited success. While the Administration did not recommend total elimination of the program in FY 1988, it has requested more than a twenty percent reduction in funding -- an amount which, according to the agency, will in fact cut the number of animal welfare inspections performed by one-half.

I do not wish to take a great deal of the Subcommittee's time this morning, especially for a problem with which you are well aware. However, there is much at stake here for the future of research, for the welfare of laboratory animals and for the reputation of USDA.

APHIS has the responsibility -- the congressionally mandated responsibility under the Animal Welfare Act -- to inspect more than 3,700 animal dealers, 1,400 exhibitors, 1,200 research facilities and 300 intermediate handlers as well as to conduct thousands of airport inspections. In FY 1986, APHIS made well over 18,000 inspections pursuant to the Animal Welfare Act. While the agency has inspection authority for many other critical agriculture programs effecting the health of people, animals and our economy, I doubt that any of these programs attracts more public attention than inspections related to the care and treatment of laboratory animals. As you know, there is a small, but very vocal, minority of people who oppose the use of animals in research. This minority uses almost any means to gain media coverage, ranging from demonstrations and rallies to research facility break-ins, theft, vandalism and personal threats against researchers. Because of allegations of abuse by these extremists, a very concerned public is lead to question how laboratory animals are treated in research. The answer Congress has given to these questions and concerns is the Animal Welfare Act.

First passed in 1966, the Act has been strengthen and clarified in a series of amendments, most recently effective in December 1986. Needless to say, the research community as well as responsible animal welfare groups depend on consistent, careful enforcement of the Act to maintain public confidence in research which of necessity relies on laboratory animals. Inadequate funding of the APHIS inspection program could seriously impede research and, ultimately, jeopardize the future health and well-being of the nation. If faith and trust in the current enforcement program is lost, there will be increasing pressure to curtail or possibly eliminate the use of animal models in biomedical research and testing. Congress has wisely recognized the essential federal role in ensuring that vital research is continued. What remains to be provided are the necessary resources required by APHIS to do the job.

Currently, APHIS devotes less than two percent of its total budget to Animal Welfare Act duties -- this is less than $6 million to inspect the 6,500 entities I mentioned previously. APHIS has not received an increase in funding since FY 1981. Frankly, we in the research community have never understood how the agency has managed. Perhaps the answer is... not as well as it should.

Given the greatly expanded duties assigned to the agency in the recent Animal Welfare Act amendments, we believe a reasonable increase is now in order. Animal welfare and scientific organizations agree that $ 10 million could provide the high quality inspection program the public expects and Congress has already mandated. The recommended increase would ensure that, as required by law, all covered facilities would be adequately and regularly inspected, that inspectors are thoroughly trained -- which has not been possible with such limited funding, and that APHIS has the management and administrative resources to carry out its current and new responsibilities. Mr. Chairman, I have a letter to you in support of this recommendation from approximately 100 scientific and animal protection organizations which I submit for the record.

Thank you once again for the opportunity to appear today.

April 6, 1987

The Honorable Quentin N. Burdick
Chairman, Appropriations Subcommittee
on Agriculture, Rural Development and
Related Agencies
SD-140 Dirksen Senate Office Building
Washington, DC 20510

Dear Mr. Chairman:

The U.S. Department of Agriculture Animal and Plant Health Inspection Service (APHIS) program for enforcement of the Animal Welfare Act would be reduced fifty percent by the inadequate funds alloted in the President's FY 1988 Budget. Such a request is totally inconsistent with the Committee on Appropriations' previous funding actions as well as the new and expanded responsibilities given the agency by Congress under the Animal Welfare Act as amended effective December, 1986.

Your leadership in ensuring continuation of the APHIS animal welfare program in the past is most appreciated by the undersigned organizations. Once again, scientific and animal protection organizations urge you to take the lead in providing the funding required for the consistent, high quality inspection program the public expects and Congress has already mandated.

In FY 1985 and 1986, USDA reprogrammed funds to give APHIS approximatley $6 million for animal welfare activities. Congress also appropriated this amount for the current year. In view of the recent Animal Welfare Act amendments attesting to the public's interest in the care and treatment of animals, the organizations listed below support an FY 1988 appropriation of $10 million for the APHIS Animal Welfare program. The recommended increase would ensure that, as required by law, all covered facilities are adequately and regularly inspected, that inspectors are thoroughly trained, and that APHIS has the management and administrative resources to carry out its new responsibilities.

Your consideration of this recommendation will be most appreciated. Please contact Christine Stevens, Society for Animal Protective Legislation (202-337-2332), or Frankie Trull, National Association for Biomedical Research (202-857-0540), should you or your staff have questions or require additional information.

Sincerely,

American Academy of Otolaryngology Head and Neck Surgery
American Association of Thoracic Surgery
American Association of Chairmen of Departments of Psychiatry
American Association of Directors of Psychiatric Residency Training
American College of Physicians
American College of Surgeons
American Diabetes Association
American Federation for Clinical Research
American Humane Association
American Medical Association
American Neurological Association
American Pediatric Society
American Physiological Association
American Psychiatric Association
American Psychological Association
American Society of Hematology
American Society of Microbiology
American Society for the Prevention of Cruelty to Animals
American Veterinary Medical Association
Animal Allies Humane Society, Duluth, MN
Animal Care and Welfare/SPCA, Pittsburg, PA
Animal Protection Institute
Animal Protective League, Milwaukee, WI
Animal Welfare League of Arlington, VA
Association for Academic Psychiatry
Association for Academic Surgery
Association of Academic Departments of Otolaryngology
Association of American Medical Colleges

Association of American Universities
Association of Medical School Departments of Biochemistry
Association of Medical School Pediatric Department Chairmen
Association of Orthopedic Chairmen
Association of Professors of Medicine
Association of University Anesthetists
Association of University Professors Of Opthalmology
Association of University Radiologists
Bellingham-Whatcom County Humane Society, Bellingham, WA
Bismarck Humane Society, ND
Black Hawk Humane Society, Waterloo, IA
Bonneville County Humane Society, Idaho Falls, ID
Brazos Animal Shelter, Bryan, TX
Broome County Humane Society, Binghamton, NY
Citizens for Animal Protection, Houston, TX
Citizens for Animal Welfare Education, Saginaw, MI
Federated Humane Societies of Pennsylvania
Florida Federation of Humane Societies
Fund for Animals
Greenville Humane Society, SC
Humane Association of Enid, OK
Humane Society of Tampa Bay, FL
Humane Society of Bay County, MI
Humane Society of Central Oregon
Humane Society of Huron Valley, MI
Humane Society of Seminole County, FL
Humane Society of St. Lucie, FL
Humane Society of the United States
Humane Society of Vero Beach, FL
Ingham County Humane Society, Lansing, MI
Iowa Federation of Humane Societies
Jefferson County Humane Society, WI
Juvenile Diabetes Foundation
Kentucky Huamne Society and Animal Rescue League
Little Rock Department of Animal Control
Manhattan Animal Shelter, KS
Massachusetts Society for the Prevention of Cruelty to Animals
Mississippi Animal Rescue League
Nashville Humane Society
National Alliance for Animal Legislation
National Association for Biomedical Research
National Assoc. of State Universities and Land Grant Colleges
Ogden City Animal Services, UT
Orlando Humane Society
Pharmaceutical Manufacturers Association
Prescott Valley Animal Control, AZ
Progressive Animal Welfare Society, WA
Pulaski County Humane Society, AR
Salt Lake County Animal Services
St. Herbert's Giralda, NJ
Sheboygan County Humane Society, WI
Society for Animal Protective Legislation
Society for Neuroscience
Society for Pediatric Research
Society of Academic Anesthesia Chairmen, Inc.
Society of Critical Care Medicine
Society of University Otolaryngologists
South Dakota Animal Welfare League
South Lake Tahoe Humane Society, CA
Stray Haven Humane Society, NY
Surgical Infection Society
The Endocrine Society
Tippecanoe County Humane Society, IN
University Association for Emergency Medicine
Waco Animal Shelter, TX
Western Pennsylvania Humane Society
Wisconsin Humane Society

INTER-SOCIETY COUNCIL ON BIOLOGY AND MEDICINE

STATEMENT OF CHARLES CHAMBERS, EXECUTIVE DIRECTOR, AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES, IN BEHALF OF THE INTER-SOCIETY COUNCIL ON BIOLOGY AND MEDICINE

Senator BURDICK. Our next witness is Dr. Charles M. Chambers, executive director of the American Institute of Biological Sciences, representing the Inter-Society Council on Biology and Medicine.

Dr. CHAMBERS. Thank you, Mr. Chairman.

My name is Charles Chambers, and I am the executive director of the American Institute of Biological Sciences. AIBS is a federation of 40 professional societies and research laboratories representing life scientists across the country.

I appear before you today on behalf of a coalition of scientific and medical bodies interested in basic biological and biomedical research, the Inter-Society Council for Biology and Medicine. The members of the council are listed.

Collectively, we represent working scientists drawn from every major research, educational, and clinical center in this country. Our constituencies are committed to conducting responsible research directed toward preventing disease and curing illnesses in both humans and animals. We appreciate this opportunity to share our views and concerns with you.

As professional scientists, we are dedicated to maintaining the highest standards of scientific and ethical responsibility in research involving animals. The responsible research community feels strongly that all valid research efforts using animals must be conducted with the utmost concern for humane procedures and in careful adherence to federal regulations. The federal agency charged with the enforcement of the standards contained in the Animal Welfare Act, as amended last year, is the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture.

We heartily support the work of APHIS. We are encouraged that this year the administration did not follow precedent and recommend the total elimination of the animal welfare inspection program. We are concerned, however, because the President's request amounts to a decrease for this program. For the current year, fiscal year 1987, just under $6 million is available. Only $4.9 million has been requested for fiscal year 1988.

We feel that this level is not sufficient. We instead recommend that you increase the funding level for this program to $10 million. We feel that this is the minimum amount necessary for APHIS to properly carry out its expanded mandate under the recently amended act.

I think that we can even draw more clearly the dramatic need for this program based on the ruling announced Monday by the U.S. Supreme Court that the direction of the Congress that the Animal and Plant Health Inspection Service is the sole designated agency for administering the Animal Welfare Act. This further dramatizes the importance of the work of this particular agency.

Let me review why we feel that this level of funding is appropriate. First, we need to develop and maintain an adequate cadre of inspectors who are qualified to inspect biomedical and behavioral research facilities. In fiscal year 1986, APHIS inspectors were able to inspect 2.2 sites or facilities, and 1,241 institutions. The proposal from the administration would result in a 50-percent decrease in site visits, and we feel that an additional $3 million will allow a 50-percent increase of inspections, and this would support more and better quality inspections, especially of research facilities.

We have had a continuing theme with the implementation of the Animal Welfare Act of the level of training and preparation of the inspectors who go into the field. We feel that because of the expanded mandate that Congress enacted last year, in terms of the quality of the animal care specialists, and the special types of skills that they require to certify the care of the animals, that additional funding is needed there.

We do support the computerized recordkeeping system and feel that this initiative will result in an increase in the quality of research data that is available to medical scientists. This would amount to at least another $1 for these activities.

The administration has suggested in the past that these efforts could be handled by private groups and at the local and state level. We think that it is important for the committee to recognize the fundamental and now exclusive federal role in the animal welfare inspection activities. This exclusive jurisdiction of APHIS is important if the medical research activities are not to be mired into a continuing debate about who represents what, who has standing to handle this, that, or the other, as the Supreme Court recently ruled.

I can assure you, Mr. Chairman, that the hidden costs of delay and confusion, and confounding progress in medical research, far exceed the modest amounts that are suggested here. A cumbersome maze of conflicting local and state regulations would greatly hamper the progress of research.

We are pleased that the message sent by the Congress in the past several years has been acknowledged by the administration. We feel that $10 million would be an appropriate funding level. We also join with the animal protection and welfare groups that have presented you with the letter endorsing this level of funding.

Again, thank you for the opportunity to present our testimony, and I will be glad to respond to any questions that you may have.

Senator BURDICK. Where do your laboratories obtain their animals?

Dr. CHAMBERS. There are different classes of licensed dealers that do provide these animals. There are class A providers who actually breed within their own facilities, and supply them with various pedigrees. There are class B who do trade in animals, and collect both domestic and wild animals in this country, or who may be imported. These are purchased as research material by the laboratories.

Senator BURDICK. We heard earlier that some of the animals come from the pounds.

Dr. CHAMBERS. The animals that are used in animal research generally have to be very well cared for, and they have to have a very good pedigree. You cannot, for example, do immunology tests, or provide the Food and Drug Administration with data on reactions to medication unless the animals are properly cared for from the very beginning and have a full medical profile. Many of these animals cannot be used in biomedical research because they would not be valid.

Senator BURDICK. What happens to those animals?

Dr. CHAMBERS. I imagine that the local jurisdictions manage that as part of their public safety and health activities through whatever animal destruction processes that they have.

Senator BURDICK. Do you mean that they destroy them?

Dr. CHAMBERS. I am not familiar with the operations of the local counties that maintain the public safety and health.

Senator BURDICK In other words, you follow guidelines to make sure of your sources of laboratory animals.

Dr. CHAMBERS. Yes; that is true.

Senator BURDICK. Thank you.

Dr. CHAMBERS. Thank you, Mr. Chairman.

[The statement follows:]

STATEMENT OF CHARLES M. CHAMBERS

Summary:

We recommend $10 million in funding for FY 88 for the animal welfare inspection program of the Animal and Plant Health Inspection Service (APHIS) of the U.S. Department of Agriculture.

Mr. Chairman, members of the Subcommittee:

My name is Charles Chambers. I am Executive Director of the American Institute of Biological Sciences. AIBS is a federation of 40 professional societies and research laboratories representing life scientists across the country. I appear before you today on behalf of a coalition of scientific and medical bodies interested in basic biological and biomedical research, the Inter-Society Council for Biology and Medicine (ISCBM) listed above. Collectively, we represent working scientists drawn from every major research, educational and clinical center in this country. Our constituencies are committed to conducting responsible research directed toward preventing disease and curing illnesses in both humans and animals. We appreciate this opportunity to share our views and concerns with you.

As professional scientists we are dedicated to maintaining the highest standards of scientific and ethical responsibility in research involving animals. The responsible research community feels strongly that all valid research efforts using animals must be conducted with the utmost concern for humane procedures and in careful adherence to federal regulations. The federal agency charged with the enforcement of the standards contained in the Animal Welfare Act as amended last year, is the Animal and Plant Health Inspection Service, (APHIS) of the U.S. Department of Agriculture.

We heartily support the work of APHIS. We are encouraged that this year, the Administration did not follow precedent and recommend the total elimination of the animal welfare inspection program. We are concerned, however, because the President's request amounts to a decrease for this program. For the current year--FY 87--just under $6 million is available. Only $4.9 million has been requested for FY 88. We feel that this level is not sufficient. We instead recommend that you increase the funding level for this program to $10 million. We feel that this is the minimum amount necessary for APHIS to properly carry out its expanded mandate under the recently amended Act for the following reasons:

First and foremost, the research community continues to stress the importance of funding consistent with the need to develop and maintain an adequate cadre of inspectors who are fully qualified to inspect biomedical and behavioral research facilities. This year, the Department's proposed reduction in the animal welfare inspection program would reduce the average number of inspections by fifty percent: This would result in an average of one and one-half inspections annually at research facilities. In contrast, APHIS inspectors visited an average of 2.2 sites per facility at 1241 research institutions in FY 86. We feel that the proposed reduction would negatively affect the ability of APHIS to carry out its expanded obligations under the recently amended Act. Instead of the proposed 50% decrease, we recommend a 50% increase in inspections. We therefore endorse an additional $3 million in funding over the FY87 program level, in order to support more, and better quality inspections, especially of research facilities.

In addition, we endorse additional funding for the inspection program for FY 88 in order to enable APHIS to continue to work toward the long-range goals it has established in the area of training. We in the research community are particularly interested in efforts aimed at ensuring that APHIS veterinarians are trained in laboratory-animal care. We believe that such specific training is necessary in order for the inspection function to be carried out in a manner that is consistent with the expanded mandate of the Act.

APHIS also has initiated plans to computerize its record-keeping system. We feel that additional funding is needed to support this initiative, as well. The increased information collection activities which will be associated with the recently-proposed regulations on exercise for dogs and psychological well-being of primates will also require additional funds. We estimate that at least another $1 million should be afforded for these activities.

In past years, the subcommittee has consistently deflected the Administration's contention that all responsibility for animal welfare activities should be shouldered by states or private groups. Although total elimination of the federal program is not recommended again this year, the Department has stated its intent to concentrate its resources on agricultural pests and diseases, and to again rely on states, industry, and humane groups to shoulder responsibility for animal welfare functions. We urge you to reject this reasoning, and to again recognize the fundamental federal role in animal welfare inspection activities.

Because the federal government supports most of the biological and biomedical research in this country, it is appropriate for it to assume responsibility for ensuring that the researchers it supports meet animal care standards. No state or locality is presently capable of assuming this responsibility. Beyond this, however, we believe that relegation of this responsibility to state and local authorities would result in a maze of cumbersome and contradictory standards that would unduly hinder federally-supported research efforts, ultimately undercutting medical advancements aimed at promoting health and preventing disease in our Nation's citizens.

We are pleased that the message sent by Congress for the past several years has been acknowledged by the Administration, and are heartened that this year the inspection program was not once again proposed for elimination. However, your continued support is all the more important. We urge the subcommittee to provide increased support for the animal welfare inspection program. We feel that $10 million is an appropriate funding level consistent with the important functions of this program.

Again, thank you for attention to our testimony, and I will be glad to respond to any questions or comments you or your subcommittee colleagues may have.

PET INDUSTRY JOINT ADVISORY COUNCIL

STATEMENT OF MARSHALL MEYERS, DIRECTOR

Senator BURDICK. Our next witness is Mr. Marshall Meyers, director of the Pet Industry Joint Advisory Council.

Mr. MEYERS. Mr. Chairman, I appreciate having the opportunity to testify today. I would request that my testimony be made part of the record, and I will highlight, because sort of the end of the testimony on APHIS, I feel a little bit like the tail wagging the dog.

I would like to highlight a couple of key points, however. When one reviews APHIS' work plans for fiscal years 1987, 1988, and 1989, we see some expanded and aggressive programs, including improved training, improving the quality of the inspectors inspecting the dealers and the exhibitors. This has been mandated by the Congress through revisions to the act. It has been mandated by public concern.

Those who are regulated, such as members of the pet industry, encourage increased inspections. Yet, for this program to remain viable, and effective, they need money. So, we, too, are here to support the level of funding at $10 million.

One thing that was highlighted was an inspection report prepared by the Department on Kansas alone, where 66 percent of the inspection reports that were prepared by APHIS inspectors were inaccurate, incomplete, or incorrect. Also, some of those inspectors never found a single deficiency in an entire year, and we find that inconceivable.

At page 3 of our testimony, we have prepared a chart showing a brief spurt of improved inspections in fiscal year 1985, but a decline in 1986. For fiscal year 1987, they will be averaging 1.5 inspections across the board. According to the work plan, for a facility where they find no problems, they will just inspect it once. We think that that is grossly inadequate.

In asking for more funding, we recognize your problems, and we urge that possibly the committee urge APHIS to reevaluate their license fee structures. As I recollect, some of the minimum fees are $25. I contend that APHIS can't process a check for $25, let alone all of the general inspection procedures.

Although we are not necessarily endorsing the user fee concept at this time, it may be something that they can be urged to look at, because instead of asking the Congress for more money, maybe some of the burden should be placed back on the licensees, to help share some of those costs.

One segment of the commercial pet industry presently pays user fees, this is the pet import program. It has not been as devastating as we thought it would be. We have learned to live with it as a cost of doing business.

We urge that the committee find a method for carving out $10 million that the Department desperately needs. Also, we encourage APHIS to reevaluate their programs and their fees schedules.

I thank you very much, sir, and I will be happy to answer questions.

Senator BURDICK. Thank you. What percentage of the pet industry do you represent?

Mr. MEYERS. Of the pet stores for the consumers, possibly 15 percent of the pet stores throughout the country are members of the association. Of those that are carrying puppies, it is probably about 50 percent of the stores that carry puppies.

Senator BURDICK. How do you maintain the standards set by the Animal Welfare Act.

Mr. MEYERS. We publish on a regular basis, a summary of all violations that APHIS cites. We report on prosecutions. We circulate information to the membership. We are in the process of putting out an animal husbandry manual, which will be available in a few weeks that will go to all pet stores and livestock breeders on basic animal husbandry procedures, which carries in it warnings about the provisions of the act that they should be aware of, and be in compliance with.

[The statement follows:]

STATEMENT OF MARSHALL MEYERS

Mr. Chairman and members of the Committee, my name is Marshall Meyers. I am appearing today as General Counsel of the Pet Industry Joint Advisory Council (PIJAC) to encourage the Subcommittee to ensure that adequate appropriations are provided for vigorous and effective enforcement of the Animal Welfare Act by the USDA's Animal and Plant Health Inspection Service.

PIJAC is a national trade association representing leading pet industry retailers, distributors, livestock breeders and importers, manufacturers, trade associations and aquarium, avian and herpetological societies throughout the country. PIJAC members breed, import/export, transport and sell most species of animals not only as pets, but also as zoological specimens.

PIJAC works extensively with federal, state and local legislative and regulatory bodies in the formulation of laws and regulations relating to companion pet animals. We are deeply concerned with humane care and responsible pet ownership and we recognize the need to work with and support USDA in its continual improvement of the Animal Welfare Act program. PIJAC, therefore, strongly supports increased, not decreased funding for Animal Welfare programs as proposed by the Administration.

PIJAC members are appreciative of the leadership that this Subcommittee has exhibited by continuously recognizing the importance of a viable and national Animal Welfare program, including rigorous inspection and enforcement. PIJAC urges the Subcommittee to appropriate $10 million as the minimal amount required for USDA/APHIS in FY88. This amount is needed to adequately implement APHIS' mandate under the Animal Welfare Act, especially as amended by the Congress in December 1985.

A review of APHIS' Program Forecasts and Long-Range Plans for FY87, FY88, and FY89, indicate, among other things, USDA's plans for:

1. Conducting approximately 5,000 carrier inspections (major airports only); and
2. Inspecting dealers, exhibitors, intermediate handlers, and research facilities on an average of one and one-half times, including reinspections. All facilities are to be inspected at least once; and

3. Investigating all public complaints and documenting all apparent violations for possible legal action; and
4. Continuing emphasis on training field personnel on proper inspection procedures; and
5. Implementing new regulations and standards mandated by the 1985 amendments to the Animal Welfare Act; and
6. Initiating revisions to the regulations.

As USDA's tasks become more expansive and costly, the Administration proposes less funding. A viable, effective program requires increased inspections, manpower and training. This inconsistency must be remedied.

The chart below depicts the numbers of licensees and registrants, the average number of inspections conducted under the Act; and the total number of airport inspections.

	FY84		FY85		FY86	
	Facil.	Avg. Insp.	Facil.	Avg. Insp.	Facil.	Avg. Insp.
Dealers	3,365	2.3	3,414	2.5	3,708	2.0
Exhibitors	1,377	1.9	1,386	2.3	1,415	2.1
Research[1]	1,186	1.8	1,219	2.7	1,241	2.0
Handlers	228	1.5	288	1.7	246	1.2
Carriers	130		132		138	
TOTAL	6,284		6,439		6,748	
Airport Inspections	2,523		4,027		2,524	

Source: USDA/APHIS, February 5, 1987.

As the chart clearly demonstrates, the number of facilities under the purview of the Act has increased steadily over the past three years. Yet the average number of inspections as well as the total number of airport inspections were reduced during FY85 and FY86. Even further reductions are in store for FY87 and FY88. The level of implementation and enforcement comtemplated by the Congress simply cannot be achieved by the reduction of funding in the Administration's proposal.

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1. Multiply by 2.2 to determine the number of sites per facility.

The current fiscal constraints placed not only on the federal government, but also on state and local governments has led to various proposals that states, industry and humane groups should take some of the responsibility in ensuring compliance. Such proposals are idyllic in the real world. Delegation of enforcement responsibility to state or private organizations has not and cannot work. It is virtually impossible for each state to duplicate the efforts of APHIS as recommended by the Administration. One can easily imagine the chaos which would result from conflicting rules which would evolve if state and local governments attempted to supplant or enforce the Animal Welfare Act. The impact upon interstate commerce would be substantial.

Attempts to delegate the responsibility to inspect and enforce the Animal Welfare Act or similar state and local laws by non-governmental organizations raises a fundamental Constitutional conflict between traditional notions of government and the policy of conferring upon private groups and their agents official government powers. Many humane societies are either philosophically opposed to commercial breeding facilities or are in direct competition with the pet industry by deriving substantial funds from the sale of animals and pet products and accessories. Such delegation disregards the basic due process rights of the regulated parties by abrogating the state's obligation to ensure equal and fair enforcement of its laws.

While the humane community and pet industry do not always reach accord on animal welfare concerns and industry requirements, we are in uniform agreement that effective enforcement of the Animal Welfare Act by APHIS is an essential and critical element in achieving our respective goals. History has shown that the most effective and useful mechanism for regulating animal welfare is at the national level.

PIJAC, therefore, urges this Subcommittee to support appropriations of at least $10 million for the USDA/APHIS Animal Welfare Act Inspection Program for FY88.

Thank you for this opportunity to appear before the Subcommittee. I will be happy to answer any questions.

NATIONAL PORK PRODUCERS COUNCIL

STATEMENT OF JIM HAUGE, MEMBER

Senator BURDICK. Our next witness is Mr. Jim Hauge, member of the National Pork Council. North Dakota still keeps coming.

Welcome to the committee, Mr. Hauge.

Mr. HAUGE. Thank you, Mr. Chairman.

I am pleased to have this opportunity to be here this morning, and to represent the National Pork Producers Council as a member of the executive committee.

As our prepared statement indicates, we are concerned about disease control, Agricultural Research and Extension Service.

Mr. Chairman, we are especially concerned about USDA-ARS pseudorabies funding in the 1988 USDA budget. Our projects are mandated, and they have been successful. We feel that eradication is attainable, and that we should go forward at this point. We ask your assistance in appropriating $2.8 million in the 1988 budget.

We feel that it would be regressive if this project was ended at this point. There are three areas that have been cleaned through the vital project that could be reinfected, and the ultimate cost of eradication would be higher.

The pork producers are now spending about $30 million a year just to live with this disease. This breaks down to $17.7 million for vaccines, $11 million from pig deaths, and $2 million for testing. These figures do not include sub-clinical, respiratory, or reproduction problems caused by PRV. Moreover, vaccines do not cure PRV, but only work to help prevent the spread of the disease.

In addition, it should also be noted that pseudorabies is not specific to swine. It is a multispecies disease, and it affects all domesticated livestock. This means that we have to stamp out pseudorabies in cattle, sheep, cats, and dogs, where the symptom is death. Hogs, on the other hand, can carry the disease. Younger hogs usually die from the disease, older animals may carry this disease to other animals, such as cattle, cats, and dogs.

In 1974, about one-half of 1 percent of all the swine in the United States had pseudorabies. In 1980 to 1981, it was determined that 8.4 percent had pseudorabies in the United States. For this reason, we ask for your support to help eradicate this disease, and keep it from spreading.

We are also concerned that funds for animal ag research have fallen behind the funds that are available for other research projects funded by the USDA. Livestock farmers produce about 50 percent of the total farm income, but livestock research has not even come close to 50 percent of the ag research dollars.

Expenditures in swine research have been inadequate, but we have an opportunity to expand these swine production research facilities at the Meat Animal Research Center at Clay Center, NE. The swine production research program centers at MARC account for the major USDA effort on pork production. The programs make significant contributions to the efficiency and competitiveness of our producers.

Historically, animal research has given a good rate of return per dollar invested. Swine research heads the list of the rates of return. Specifically, we are asking for additional appropriation of $3.7 million to increase the capacity of the Animal Research Center to be able to solve a whole range of problems in the production cycle.

We also have a number of other recommendations dealing with ag research and the Extension Service that are more detailed in our written testimony.

Mr. Chairman, I would like to thank you for this opportunity to come before you this morning and testify to the subcommittee, and I will try to answer any questions that you might have.

Senator BURDICK. Thank you for your testimony.

I have two questions for you. How is the pork checkoff working, and what have you done with the funds?

Mr. HAUGE. It is working out quite well. We are anticipating that about 15 percent of requests are for refunds, and it has been running about 8 to 10 percent. It is going along quite well.

Senator BURDICK. What are you doing with the funds?

Mr. HAUGE. Mr. Chairman, we did not use the funds to send me here today. That is one way that we don't use the funds. How we do use the funds, though, is more in the line of promotion, new product development, and merchandising our product, and also in the food service industry.

Senator BURDICK. You propose an addition of $2.7 million for expansion of the Animal Research Center. What will these funds do?

Mr. HAUGE. Mr. Chairman, these funds will be used to renovate and expand the Meat Animal Research Center at Clay Center, NE. Right now, the possibility of a Beltsville Station, we need that so as to continue the swine research. The present facilities limit the type and scope of many research questions.

The Meat Animal Research Center has become ARS' primary and only swine research center, and it is important that research have the capability to answer relevant questions of animal health research, disease resistance, production systems. It also increases the interaction of research units, allowing to diversity in areas not currently studied.

In addition to that, sir, by having a research facility, it allows us as producers to keep up with the most efficient and the most advanced technology in the industry, to be competitive not only in our country, but on a worldwide basis also.

Senator BURDICK. Thank you very much for your testimony.

Mr. HAUGE. Thank you, Mr. Chairman.

[The statement follows:]

STATEMENT OF JIM HAUGE

We thank you for the opportunity to submit this information for your study and for the record. Representatives of the National Pork Producers Council (NPPC) have been afforded this opportunity for many years and are always courteously received, which we do appreciate.

NPPC represents 100,000 pork producers and their families in 45 member states which are affiliated with the national organization. The NPPC represents virtually all of the commercial pork production in the United States.

The fiscal year 1988 agriculture budget under consideration is of great importance to pork producers and the NPPC. We are especially concerned about the allocations for disease control, agricultural research, and extension service. These areas all have a great impact on the profitability of our members. In fact, as demonstration of this concern, NPPC cooperates directly and indirectly with the various government agencies in each of these areas.

NPPC has also been concerned with disease surveillance and health protection activities of USDA. A viable and healthy livestock industry is critical to the strength of our economy and to the health and welfare of persons throughout the world. Advances in veterinary medicine research and practice have had considerable influence on animal agriculture -- controlling or eliminating some of the most devastating diseases plaguing livestock. Despite these advances, disease continues to be the single greatest deterrent to efficient livestock production.

Thousands of food producing animals and pets die from the pseudorabies disease (PRV) each year. We have the technology to eradicate pseudorabies in the U.S., but need government support if we are to be successful in the PRV eradication effort.

NPPC annually provides more than $300,000 to initiate research projects in areas of producer priority to universities nationwide. This NPPC seed money often generates federal funding which is necessary to maintain sound research programs. Such funding also contributes to higher education as funds are used to support the projects of graduate research assistants.

NPPC feels strongly that advanced research is necessary just to maintain the U.S. position in productivity, disease control and prevention, food safety and human nutrition. Additional increments of funding helps the industry to make strides in these areas in order to enhance competitiveness and profitability for a large segment of agriculture.

As for extending the knowledge gained, NPPC works closely with the federal and state Extension Services. We provide many materials and forums to gather the information for subsequent extension to our membership. This activity is fundamental to progress. The information must not only be developed, but it must be transmitted to the users for adoption.

The nation's pork producers, as represented by NPPC, are cognizant of the tremendous budget deficit that the government faces. We are concerned about the effect of this deficit on the nation's economy and support efforts to reduce the deficit. Although the deficit, and outlays for the entitlement programs, and the Department of Defense make the amounts that we are discussing seem insignificant, we are aware that increases must be compensated for by decreases in budgets if our efforts to reduce the budgetary deficits are to succeed.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE (APHIS)

We are asking that the line item for pseudorabies be restored in the APHIS budget for animal health programs and that $2.8 million be budgeted for PRV programs in fiscal year 1988. PRV is not a disease unique to the swine industry, and is in fact a multi-species problem affecting other livestock and domestic pets.

The current cost of PRV to producers is estimated at $30 million annually. This breaks down into $17.7 million for vaccines, $11 million from pig deaths and $2 million for testing. These figures do not include sub-clinical, respiratory or reproduction problems caused by PRV. Moreover, vaccines do not cure PRV, but only work to help prevent the spread of the disease.

Before hog cholera eradication began, losses from the disease were estimated at $50 million annually ($25 million for vaccination). Hog cholera was eradicated by 1976 at a cost of $129.5 million. In 1986 dollars that would have amounted to $370 million. It is obviously important for us to keep this in mind as we consider what constitutes a good investment in allocating funds for pseudorabies.

USDA/APHIS has been extremely cooperative over the last four years in the initiation and administration of pseudorabies pilot projects. These pilot projects have been successful in evaluating PRV control and eradication procedures. Through application of tools currently available, pseudorabies area control leading to eradication is not only feasible, but already underway in some states. It would be regressive if adequate funding were not made available in 1988 just as real progress is beginning to be made. If cooperative efforts between producers and USDA are stopped completely, as proposed by the administration's budget, resulting breakdown in PRV control efforts could allow areas to become reinfected and ultimately increase the total cost of eradication.

As a result of the PRV pilot studies, pork producers are proposing that a ten-year program start in 1989 to eradicate pseudorabies, with a cost to be shared between the producers and the state and federal governments. Lack of funding in 1988 could obviously hinder future efforts in planning the eradication of PRV, and jeopardize the current program momentum that has developed in a number of states.

The industry will continue to develop technology if it is understood that eradication is the ultimate goal. In the states where federal dollars have been made available, most of the states have appropriated additional funds to help deal with the problem.

AGRICULTURAL RESEARCH SERVICE (ARS)

The research expenditures for the improvement of animal agriculture are not proportional. We are concerned that the funds for animal agriculture research have steadily fallen behind the funds that are available for other forms of research funded by the department. The livestock farmer produces approximately 50 percent of the total agricultural income; but unfortunately, animal agriculture never receives anywhere near 50 percent of the research dollars.

Consumers are the ultimate beneficiaries of agricultural research through lower prices paid for efficiently produced products. Animal agriculture shows a very high rate of return on investment in research, indicating that past expenditures were comparatively lacking. Swine research heads the list of high rates of return. It is therefore difficult for our producers to understand why there is such a disparity in the funds made available for animal and plant agriculture.

We urge the expansion of swine production research facilities at the Meat Animal Research Center (MARC) in Clay Center, Nebraska. The swine production research centers at MARC account for the major USDA effort on pork production. The programs make significant contributions to the efficiency and competitiveness of our producers.

An additional appropriation of $3.7 million is requested to increase the capacity of the swine facilities at MARC, so swine researchers will be able to study the full range of problems in the production cycle.

We are also convinced that for both animal and total agricultural research efforts to be successful in future years, additional funds for training scientists will need to be provided. NPPC recommends, therefore, that graduate fellowships for fiscal year 1988 be increased to $10 million (rather than be eliminated, as proposed in the present budget).

COOPERATIVE STATES RESEARCH SERVICE (CSRS)

The Agricultural Experiment Station system with research programs distributed in all 50 states and U.S. territories, coordinated by CSRS and combined agricultural interests, brings together state and industrial resources with federal funds to form the ideal partnership to provide answers to America's agricultural problems. Proper use of the knowledge generated by agricultural research through education and extension will assure the best application of it.

We are disappointed to see that the administration budget did not propose any funds for animal health research under Section 1433. NPPC recommends, therefore, that Congress provide funds for the Section 1433 research at the $6.4 million level.

Animal disease losses cost the American farmer, and thus the public, nearly $17.5 billion annually. Significant reductions in these losses are essential if the annual income from the sale of livestock products is to continue to represent nearly 50 percent of U.S. farm income and livestock products are to continue to be readily available. Intensified and expanded research is needed to find solutions to the most serious animal health problems that limit the efficient production of animal food products. Recent technological advances in the biological and medical sciences that would be applied to veterinary medical problems under this problem offer promise of major breakthroughs in the diagnosis, prevention and control of food animal health hazards. Research that allows the industry to rely less on antibiotics and more on natural ammunity and superior genetics will be extremely helpful.

NPPC recommends the Special Research Grants Program be funded at the $50 million level as recommended by the Experiment Station Committee on Organization and Policy (ESCOP).

We are pleased to see that nearly $45 million is again in the administration budget for competitive research grants. However, we support increasing the budget to $10 million for the animal science portion of competitive research grants, as recommended by ESCOP. NPPC has stressed, in several statements, that there is a dire need for good research in animal production. The research bank has almost been exhausted, and we are now in need of real breakthroughs to allow animal production to maintain its competitive position in the total agricultural industry. There are exciting possibilities which can stem from biotechnology research. We support a major increase in the competitive grants research for biotechnology.

We are convinced that these increases in competitive research grants will increase the training of young scientists who are necessary for U.S. agricultural research to maintain its position in the scientific world. This basic research, which will be conducted under the Competitive Research Grants Program, is a fertile training field for young scientists who must fill the ranks of those senior scientists who are constantly being lost to attrition.

FEDERAL EXTENSION SERVICE (FES)

The Extension Service has a long impressive record of being instrumental in new technology transfer from research to the farming level.

In this time of economic stress on pork producers and all farmers, the need for efficiency is more important than ever. The Extension Service not only is instrumental in helping farmers become more efficient to enhance the possibility for profit, but has more recently provided financial and stress counseling to troubled farmers.

NPPC joins with the National Association of State Universities and Land-Grant Colleges in recommending $30 million in Extension special programs on agricultural competitiveness and profitability.

It is critical to pork producers that the Extension Service be funded so that programs such as the Residue Avoidance Program and Integrated Resources Management can continue. Funds need to be identified as a line item in the FES budget for residue avoidance programs in livestock similar to that of pesticide impact assessment, pesticide applicators training, and integrated pest management that applies to crops. Currently funds are provided for this work only when they are available and redirected from Food Safety and Inspection Service to FES. We urge that at least $150,000 be provided for residue avoidance programs in livestock.

Conclusion

The National Pork Producers Council is closely involved with, and significantly effected by, the programs being discussed here today. We appreciate your consideration of our views as we strive to continue to provide the American consumer with a safe, wholesome diet balanced with nutritious pork.

Porter International Corp.

STATEMENT OF SHARON PORTER, CHAIRMAN

Senator Burdick. Our next witness will be Sharon Porter, chairman of the Porter International Corp.

Ms. Porter. Good morning.

I am Sharon Porter, and I am the chairman of Porter International Corp., which is located in Wisconsin. We are an import/export marketing consulting firm with markets in the Middle East. Currently, we are exporting processed food and nonalcoholic beverages, beer and alcohol.

Living and doing business in the Midwest made me aware of the crisis in the farming industry. We need to develop stronger agricultural export markets, and it is very evident that the ability to do so is becoming increasingly difficult.

In the attempt to alleviate some of the problems, the government in past years passed legislation to aid different aspects of the agricultural industry. The 1985 farm bill has offered some hope to Wisconsin dairy farmers.

The Dairy Export Incentive Program has just recently been implemented through the government Department of USDA, FAS, and the CCC. It allows the government to purchase surplus dairy products for exporters to sell to Third World countries. This program is selective. It is limited to specific products and specific countries. Although this program is a positive step to acquire export sales, it is sporadic by its definition, it only responds to crisis. We need to plan a program or develop a system to aid exports on a continuing basis.

Our current agricultural policies are reactionary. We respond to crisis. This pattern of crisis/response leaves the farmer unable to plan and produce for a dependable market.

Porter International Corp. has had many opportunities to bid on agricultural products and commodities, and simply has been outpriced in the world market. The fair trade policies adopted by the United States makes it impossible to be competitive in our pricing.

Export is business. It is a big business that affects the balance of trade, the value of the dollar, interest rates, and employment. If we accept the premise that exporting is a business, then we must develop a proactive policy rather than relying on the reactive programs of the past. Developing a strong export program for agriculture products would expose us to the supply and demand of a world market rather than limitations of local markets.

The EEC realized the value of international cooperative export efforts, and organized the development of a stable marketplace, secure employment, and an improved standard of living. If separate and distinct nations of the European Continent can unify to strengthen and secure their demands, then the states of the United States, including Canada, and Mexico, which we seem to have forgotten, should be able to do the same.

Once our efforts are unified, the EEC and the U.S. agricultural products would be buying for the same market. How would we compete? In my opinion, we have several options available to us.

I would like to propose that the U.S. Government develop and implement a barter system to introduce agriculture products to the world market. A barter system would eliminate objections to prices based on dollar valuations. It could also develop brand name recognition that, hopefully, would create a desire for U.S. agricultural products.

I see a need for the U.S. Government to experiment with new approaches to export marketing. The American Bank Association has just written a book containing strategies for dealing with the economics of farming. We must search for new methods and new strategies for developing agricultural export markets so that farmers can produce knowing that they have dependable markets for their products.

Wisconsin is the dairy state of our nation, and we have exported virtually no dairy products over the past few years. Exports through a barter system can be a positive step toward stabilizing U.S. agricultural economy.

This afternoon, I have a meeting at the Department of Agriculture regarding some other issues, and also a water sterilizing system that would help eliminate contamination during the process of slaughter of products such as meat, dairy, manufactured dairy items, and poultry. This would lower the overall cost of the manufacturing of products. It would allow less waste. Again, it would increase their productivity.

I would like to offer my services in the future to work with the appropriate agencies, federal or state, to establish successful export methods and policies, and funding guidelines. I will continue to work with our governors to build up EA PAP funding of which Senator Wilson talked earlier.

The United States must act as a leader in trade. We are the number one world power, and we must begin to act and establish new policies and methods for understanding free export trade with all nations of the world in order for the world to prosper, and for future generations to develop.

I have included in my testimony some copies of Telex communications that I have received from our international markets and buyers, showing that dairy items have never been able to compete. The pricing is at least one-third, two-thirds, or three-thirds higher than what they are getting out of the EEC.

We are the EEC's ally, but the subsidizing that they have put into their marketing in order to be competitive make their products competitive have prevented us, the United States, to be confident in our quoting, or competitive in our quoting. We are sitting alone. We must be able to come up with projects. I see a bartering system allowing additional taxes to come into the United States, which would then support some of the funding projects that we have been talking about earlier here.

Thank you very much.

Senator BURDICK. Thank you very much for your testimony.

Are you aware that sales and barter authority currently exists?

Ms. PORTER. Yes, I am.

Senator BURDICK. What steps do you think Congress should take to encourage the USDA to approve barter sales?

Ms. PORTER. I think that there are many companies, not necessarily commodity products, but manufactured items, equipment and products, who are not really familiar with the bartering systems. The bartering system needs a professional in the middle to help to do that negotiation.

I think the government could help to supply a list of companies, independent companies, that are successful and have the ability to do a bartering system for a company. Then be able to set up some kind of policy so that once the products have been received into the hands of the firm, it has means with which to disburse them.

Senator BURDICK. The producers want money, they want sales. They don't want to trade.

Ms. PORTER. Yes. If we could barter products that they could then sell to another country, they could get money for it. There are ways of doing it.

Senator BURDICK. It is a good idea. Thank you for your statement.

Ms. PORTER. Thank you.

[The statement follows:]

STATEMENT OF SHARON PORTER

I am Sharon Porter, the Chairman of Porter International Corporation. We are an import, export, marketing and consulting firm with markets in the Middle East. Currently we are exporting processed food and nonalcoholic beverages.

I have long been concerned by the crisis in the farming industry. The difficulties in developing export markets has become very clear to me in the past several years. Porter International Corporation has had several opportunities to bid on agricultural products or commodities. We have simply been out priced in the world market. The Fair Trade policies adopted by the United States makes it impossible for us to be competitive in our pricing.

What I would like to propose is that the government develop and implement a barter system to introduce agricultural products to the world market. A barter system would eliminate objections to prices based on dollar valuations. It could also develop a brand name recognition that hopefully create a desire for U.S. agricultural products.

I see a need for the U.S. government to experiment with new approaches to export marketing. The American Bankers Association has just written a book containing new strategies for dealing with the economics of farming. We must search our new methods and new strategies for developing agricultural export markets. So that our farmers can go into production knowing that they have a dependable market for their products.

Exports through a barter system can be a positive step towards stabilizing U.S. agricultural economy.

As our economy changed over the past several decades, no one saw how long or how deep the American agricultural depression was going to run. Due to the concentration of farm assets in the surrounding communities, the farm crisis affects other business and industries. In an attempt to alleviate some of the problems, the government over the years has passed much legislation to aid different aspects of the agricultural industry. The 1985 farm bill has offered some hope to the Wisconsin dairy farmer. Experts believe that the whole herd buy-out will create an improved market for milk and higher milk prices for those remaining farmer. This bill also includes several export enhancement programs that should stimulate some increased interest in dairy exports.

DEIP, Dairy Export Incentive Program, has just recently been implemented through the government department of USDA, FAS and the CCC. It allows the government to purchase surplus dairy products for exporters to sell to Third World countries. This program is selective. It is limited to specific products and specific countries. Although this program is a positive step to acquire export sales it is sporadic by its definition, it only responds to crisis. We need to plan a program or develop a system to aid exports on a continuing basis.

Our current agricultural policies are reactionary. We respond to crisis. This pattern of crisis/response leaves the farmer unable to plan and produce for a dependable market.

If the U.S. is to compete in the worldwide agricultural market we must develop a plan or strategy. Exports of agricultural products can no longer be considered simply the disposal channel of surplus products. Exporting is a business. It is a big business that effect the balance of trade, the value of the dollar, interest rates, and employment. If we accept the premise that exporting is a business then we must develop a proactive policy rather than relying on the reactive programs of the past. Developing a strong export program for agricultural products would expose us to the supply and demand of a world market rather than the limitations of local markets.

The EEC was formed over thirty years ago. The organizers of this community realized the value of internal cooperative efforts and organization in the development of a stable marketplace, secure employment and an improved standard of living. Having successfully attained many of their internal goals they are taking their program into export markets. If separate and distinct nations of the European continent can unify to strengthen and secure their demands, then the states of the United States should be able to do the same.

Once our efforts are unified, the EEC and the U.S. agricultural products would be vying for the same market. How would we compete? In my opinion we have several option available to us.

1) We can deal with the EEC on their terms. Requiring the U.S. government subsidize production or pricing.

2) Continue to support Fair Trade Practices. Our past experiences has shown that our pricing is in some instances 40-60 percent higher than our competitors.

3) We could attempt to negotiate cooperative concessions from the EEC. If the Paris talks of April 1986 were any indication of the EEC's firm position, there will be no concessions in their current markets.

4) Or we could develop an alternative method of entering the market.

What I propose under the fourth item is for the government to develop a system of barter. A barter system would open new markets to countries that do not have foreign exchange ability. Would allow us an opportunity to introduce product to the foreign consumer. This would offer an opportunity to develop brand name recognition to the foreign market with the hopes of creating the desire for U.S. agricultural products. This opens up new doors allowing the foreign consumer to judge products based on factors other than low price.

If this barter system of penetrating the export market with U.S. agricultural products is successful it could provide new and better avenues for manufacturers to increase overall sales through exports. The need for implementing this program is imperative to stabilization of the U.S. economy through world trade.

TO: ABELA - A/DHABI
PV/1452/WO 16/2

ATTN: MR FAWAZ MASRI

1) PLS NOTE WE DID NOT REPLY TYTLX 177/87 AS WE KNEW SUBSIDY OF CHEESE WAS GOING TO CHANGE. WE WANT TO INFORM U PRICES CONT 4681/86 WERE BELOW COST TO ENABLE U INITIATE THIS LINE. MOREOVER PRICES WENT UP AFTER UR CFMTION BY ABT USD 300/MT DUE TO USD DROP BY 11 PCT.
BUT FORTUNATELY SUBSIDY INCREASED AS OF LAST FRIDAY BUT DID NOT COVER THE DIFFERENCE IN USD DROP.

ACCDGLY, WE HV REVISED OUR PRICES AND FLG ARE NEW LEVELS WHICH WE HOPE WILL BE ACCEPTABLE:

USD/MT C+F A/DH	CTNS	
1180	1000	FETA 16 KGS TINS
3000	500	HALLOUMI
2245	150	MOZZARELLA 10X2.3 KGS
2835	100	'' 72X227 GRS
2730	50	CHEDDAR 40X225 GR (50 PCT YELLOW + 50PCT WHITE)
2380	30	CHEDDAR 4X4.5 KGS ('' '' '' '')

PLS ADVS TOGETHER WITH QUANTITIES OF FETA 4 KGS /CHILI/ DOUMIATI IF OF INTRST.

2)
MEANTIME PLS NOTE:

A- SHREDDED MOZZARELLA IS ALWAYS GAS FILLED WHICH MAKES IT LOOK BLOWN.
MOREOVER SPICES ARE ADDED WHICH LAY ON TOP APPEARING LIKE FUNGUS.

B- HALLOUMI WE WILL SUPPLY U WHITE COLOUR FROM NOW ON.
M

3) RE 900 GR MILK POWDER PLS NOTE ELLE + VIRE PACK 400+ 1800 GR ONLY ANYHOW TRHING TO SECURE ANOTHER SOURCE.

RGDS
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22264 ABELAS EM
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AL NISR ESTABLISHMENT

PRICE LIST

No.	Description	Brand	Origin	Packing	Unit	U.S.D. / MT	20FT CONTAINER QTY PER YEAR
1	MILK POWDER	ELLE ET VIRE	FRANCE	6 x 1.8 KGS	CASE	1700.00	6
2	MILK POWDER	VAN HEEL	HOLLAND	1 x 25 KGS	BAG	1100.00	3
3	EVAPORATED MILK	KAISER	W.GERMANY	96 x 6 OZ	CASE	900.00	6
4	LONG LIFE MILK	ELLE ET VIRE	FRANCE	12 x 1 LTR	CASE	330.00	6
5	LONG LIFE CREAM	ELLE ET VIRE	FRANCE	6 x 1 LTR	CASE	1700.00	3
1	BUTTER	ELLE ET VIRE	FRANCE	20 x 1 LB.	CASE	1600.00	6
2	BUTTER PORTION CUPS	ELLE ET VIRE	FRANCE	20x100x10 GMS	CASE	2200.00	4
3	BUTTER, BLOCKS		NORWAY	1 x 25 KGS	BLOCK	1200.00	4

17 FEBRUARY 1987

FEB 17 1987

ATTN: MRS. SHARON PORTER

SUBJ: [redacted] DAIRY PRODUCTS

HAVE RECVD PAMPHLETS OF THE A/M COMPANY.

AS I UNDERSTAND FROM MR. SHALABI U.S. GOVERNMENT IS PLANNING TO SUBSIDISE DAIRY PRODUCTS.

KINDLY SEND INDICATIVE PRICES ON CANF ABU DHABI BASIS FOR THE FOLLOWING ITEMS FOR COMPARISON PURPOSES.

26 P/C INSTANT MILK POWDER IN TIN 6X1.8 KG
26 P/C INSTANT MILK POWDER IN BAGS 1X25 KG
7.5 P/C EVAPORATED MILK 96 X 6 OZ.
UNSALTED BUTTER - 1 X 25 KG
UNSALTED BUTTER - 1 X 40 X 1 LB.
UNSALTED BUTTER PORTIONS - 1 X 100 X 10 GMS
1.5 P/C LONG LIFE MILK/TETRA - 12 X 1 LTR.

PLS BASE YR PRICES ON CONTAINER LOADS PER ITEM.

TKS N RDS
FAWAZ MASRI
22264 ABELAS EM
NNNN+
201327 WOLFF UR

MAR 10 1987

10 MARCH 1987

ATTN: MRS. SHARON PORTER

TKS YR LET. 27.2.87.

RE RAISINS AND ALMONDS. HAVE PURCHASED AT SLIGHTLY CHEAPER PRICES THAN THOSE QUOTED IN YR A/M LETTER AS WE DID NOT RECEIVE YR SAMPLES AND HAD TO CATCH EARLY SHIPMENT FOR RAMADAN SALES. SHALL ASK YOU FOR FRESH OFFERS UPON RECEIPT OF YR SAMPLES FOR FUTURE ORDERS.

RE BUTTER, REGRET U.S. F.O.B. PRICES ARE ALMOST 3/HALF TIMES MORE EXPENSIVE THAN THE EUROPEAN CANDF PRICES PROBABLY BECAUSE OF COST OF PRODUCTION, SURPLUS AND GOVERNMENT SUBSTANTIAL SUBSIDIES ON DAIRY PRODUCTS.

TKS N RDS
FAWAZ MASRI
22264 ABELAS EM
NNNN+
201327 WOLFF UR

NATIONAL ACADEMY OF SCIENCES

STATEMENT OF DR. WILLIAM BROWN, CHAIRMAN OF THE BOARD ON AGRICULTURE OF THE NATIONAL RESEARCH COUNCIL

ACCOMPANIED BY:

FRED KIRSCHENMANN, PRESIDENT, NORTHERN PLAINS SUSTAINABLE AGRICULTURE SOCIETY
DR. FRED MAGDOFF, UNIVERSITY OF VERMONT
ROBERT RODALE, RODALE PRESS
RICHARD THOMPSON, THOMPSON ON-FARM RESEARCH
LARRY KING, NORTH CAROLINA UNIVERSITY

Senator BURDICK. Our last witness this morning is Dr. William Brown, honorary chairman, Pioneer Hi Bred International, accompanied by Mr. Fred Kirschenmann, president, Northern Plains Sustainable Agriculture Society, from Windsor, N.D.

Mr. BROWN. Mr. Chairman, I am William Brown. I have been in the position you enumerated in the past. I am currently serving as Chairman of the Board on Agriculture of the National Research Council of the National Academy of Sciences.

We are here as a panel. There are five of us. We are familiar with the time constraints you have, and we will do our best to complete in 10 minutes.

To complement my brief prepared statement, Mr. Chairman, which I believe you have, I wish to make just one additional point in the short time that I have allotted to be here this morning.

We are experiencing an increasing interest in the United States in the use of alternative farming systems. However, before alternative farming systems can become most effective and most efficient, we must, in my opinion, develop a more complete science, technology, and knowledge base on which the farmer can rely in his selection of the most appropriate methods applicable to his particular geographic location, and to the crops which he is interested in growing.

In other words, we need more research, and a change in research direction, but that research needs to be applicable at the farm level and the field level that will provide the farmer himself with the information he needs in order to practice alternative agriculture. We are not interested in esoteric research that will pay off in another decade.

The special problems of converting from conventional practices, heavily relying on pesticides, and purchased hydrogen, to an alternating system, using biocontrol, and biological sources of nitrogen availability will impose, I think, particularly a strain on some of the publicly supported agricultural science. This is true because it runs counter to the research emphasis the scientists have long promoted and practiced. Yet, in my opinion, the need for change is urgent, and it must be faced.

I think that one of the most important contributions that Congress could make in this particular area is to assure the availability of adequate funds to meet those needs.

Thank you, Mr. Chairman, and I would like to now introduce my colleague, Mr. Fred Kirschenmann from North Dakota.

Mr. KIRSCHENMANN. Mr. Chairman, my name is Fred Kirschenmann. I manage a 3000-acre family farm partnership near Windsor, ND. We have been operating our farm for the past 8 years without any sustaining inputs. I would like to just make one point in addition to the written statement, which I believe you have.

A lot of people are not aware that there are a growing number of farmers who are now looking for the occasion to reduce the inputs on their own farms, partially because of the costs and to keep themselves in business, and partly because in their bones that there is something wrong with the way that we are farming.

I now literally receive phone calls every day from farmers asking how they can do this. I really can't supply them with the answers to those questions. First, because if I did respond, they wouldn't do it. Second, because I don't have the answers to all the questions. We have worked it out on our own farm. What we really need desperately are some models that are developed by farmers and scientists working together, that we can put in the hands of farmers as some practical information that they can use in terms of moving in this direction if they so choose.

I think that there is a growing need and a concern by my colleagues on the farm who want to move in this direction, but just don't feel that they have the information. They can't afford to make any mistakes because their income levels are simply too tight. If they make a mistake, they are out of business. So they need help in terms of moving in this direction, if they want to.

I would encourage your support for those programs.

I would like to introduce Dr. Magdoff from the University of Vermont.

Dr. MAGDOFF. Good morning, Mr. Chairman. I am Fred Magdoff, chairman of the Plant and Soil Science Department at the University of Vermont. Soils is my particular area of expertise, soil fertility and chemistry.

We have in our department a great interest in this area, as I mentioned in my prepared statement. There is a tremendous amount of interest. One of the things in Vermont that concerns us, I know that it is a nationwide issue, is an environmental problem. We have problems with ground water pollution from nitrates and pesticides. We have widespread salmonella contamination of our meat supply. We have a variety of issues that are associated with the agriculture that has developed in the United States in the post World War II era.

Obviously, something has to change. It is not economically or environmentally sustainable or sound. I think that you are in a very unique position, and the unique position is that you have an opportunity to play a very important role in the major rethinking and restructuring of the American agricultural system.

By providing resources, you will be able to stimulate researchers and extension workers to develop and transmit to growers new techniques and approaches to problems of immediate and growing concern. You can help improve the economic well-being of farmers, and at the same time help to create a more healthy environment.

I strongly urge you to enthusiastically endorse the proposal.

Mr. RODALE. My name is Robert Rodale, and I am chairman of the board of Rodale Press, and president of the Rodale Institute. I think that it is exactly the right time for a larger program in this area.

Let me introduce Richard Thompson, who is a farmer from Boone, IA.

Mr. THOMPSON. Thank you, Chairman Burdick.

My name is Richard Thompson, and I farm 300 acres in Boone, IA. I have been farming for 30 years. The first 10 years, I used high inputs, and the last 20 years, we are using low inputs.

The bad news in Iowa is that the farms are going under. The banks are closing. But there is good news. The good news is that farmers are finding some answers to these questions on low inputs by using fall cover crops, proper manure management. We are able to save $90 per acre on the production of crops in raising corn.

In 1986, my wife and I made some 30 presentations to over 2,000 people. We conducted 18 tours on our farm, which were attended by 770 people. We do not have the answers. We need some help. So we are asking you to support the Agricultural Productivity Act with funding. We would like to have you as part of the team.

Thank you very much for this time.

Senator BURDICK. I have to go to the floor to vote, but I just want to ask one question. Is there an appropriation that you are requesting at this time for this program?

Mr. RODALE. The Budget Committee has indicated $30 million annually.

Senator BURDICK. Has there been an appropriation to the program in the past?

Mr. RODALE. This is the very first.

Senator BURDICK. I believe that it is recommended in the farm bill.

Mr. RODALE. Yes.

Senator BURDICK. The committee will have to look at it very carefully.

We thank you for your testimony again, and thank you for coming.

[The statements follow:]

STATEMENT OF DR. WILLIAM L. BROWN

I am William L. Brown. I currently serve as Chairman of the Board on Agriculture of the National Research Council, National Academy of Sciences. Prior to my retirement I was President, Chairman and Chief Executive Officer of Pioneer Hi-Bred International, Inc. of Des Moines, Iowa. Before becoming involved in corporate administration I spent 25 years conducting genetic and plant breeding research at Pioneer. So, my entire professional career has been devoted to improving agriculture both in this country and abroad.

Today I wish to briefly speak to two serious problems facing agriculture and to suggest ways by which I believe both can be solved.

Both of those problems are relatively new in that they are associated with the greatly increased use of synthetic nitrogen fertilizer and chemical pesticides that have become an important part of modern agricultural practice.

The two problems with which I am sure you are familiar are (1) the contamination of groundwater by nitrates and other agricultural chemicals and (2) the need to increase agricultural productivity by reducing input costs.

To my knowledge, groundwater contamination has been found in almost every state in which it has been studied. Some studies indicate that in relatively wet years as much as one half of the chemical fertilizer -N applied may be lost into groundwater and surface water. In some parts of the country (northeast Iowa for example) there seems to be a nearly linear relationship between amounts of groundwater nitrate present and rates of nitrogen application. It has been shown in Germany, for instance, that wells with nitrate levels above 90 ppm are common in regions of intensive agriculture and intensive feedlot farming. And it should be remembered that nitrate concentrations of more than 50 ppm are considered unsafe for health reasons. It should also be kept in mind that in the U.S. groundwater is the sole source of drinking water for more than half of all Americans.

But nitrates are not the only or perhaps the most dangerous chemical contaminant found in groundwater. In states engaged in intensive agriculture both herbicides and insecticides are turning up in groundwater with increasing frequency. Some of these chemicals are found to be at very low levels of concentration but for many of them safe levels have yet to be determined. So what appears to be a very low concentration of a particular pesticide in a groundwater source may, in fact, still be unsafe. We do know that some pesticides are known carcinogens and mutagens.

While agricultural production has shown a steady increase in this country, agricultural productivity has tended to decline. This is particularly true in the cornbelt where corn and soybeans are the primary, if not the only, crops produced by some farmers. Productivity has declined because of a change in the ratio of input costs to the market price of the commodity produced. Input costs have remained level or have increased while commodity prices have declined significantly. Thus productivity has declined even though production per se may have increased. It follows then that we can have too much production but we cannot have excessive productivity since the latter is synonymous with profitability for the producer.

What are the solutions to these problems? In regard to groundwater contamination it is clear, I think, that we must reduce the amounts of chemicals used in agriculture. We all know of instances in which more nitrogen is applied to an annual crop than can be utilized by that crop. This practice must stop. The excessive use of chemical pesticides must also be discouraged and beyond that the substitution of biological control of insects and increased use of crop rotation must be considered as alternative approaches to current farming practices. We can no longer afford to ignore or brush aside the effects on the environment and public health of some widely used agricultural practices.

A return to profitability and increased agricultural productivity will require a significant reduction in input costs. Some reduction can be achieved by substituting legumes for a part of the purchased nitrogen and by using crop rotation as an alternative to insect control by chemical insecticides. Moreover some rotation can be helpful in weed control thereby reducing the need for chemical herbicides. Fortunately a reduction in the dependence upon chemicals can help to solve both the problems mentioned earlier -- groundwater contamination and reduced productivity.

I am not advocating the total elimination of chemical farming. Some chemicals have served a useful purpose in the past and can continue to do so if wisely used. I am advocating a significant reduction in the use of ag chemicals and the widespread adoption of appropriate alternative systems where possible.

One final point. Many economic, ecological, and biological questions relative to the use of effective and efficient alternative farming systems remain to be answered. These answers are essential to the future of a sustainable agriculture. To get those answers will require expanded research programs in areas that are now receiving inadequate attention by our research institutions. The emphasis in agricultural research in the past has been on increased production. Today's research should be directed toward ways of increasing productivity. Until those questions are satisfactorily answered the agricultural economy will continue to suffer.

Thank you.

STATEMENT OF FREDERICK KIRSCHENMANN

MY NAME IS FREDERICK KIRSCHENMANN. I MANAGE A 3000 ACRE FAMILY FARM PARTNERSHIP NEAR WINDSOR, NORTH DAKOTA. SINCE 1979 WE HAVE PRODUCED ALL OF OUR CROPS (PRINCIPALLY CEREAL GRAINS AND SUNFLOWERS) AND OUR LIVESTOCK ORGANICALLY. WE MARKET THIS CHEMICAL-FREE PRODUCE THROUGH THE MERCANTILE FOOD COMPANY IN BRIDGEPORT, CONNECTICUT.

BECAUSE I AM INTERESTED IN ASSISTING THE GROWING NUMBER OF FARMERS WHO ARE SEEKING TO REDUCE OR ELIMINATE CHEMICAL INPUTS FROM THEIR FARMING PROGRAMS, I ALSO SERVE AS THE PRESIDENT OF THE NORTHERN PLAINS SUSTAINABLE AGRICULTURE SOCIETY. THIS SOCIETY, FOUNDED IN NORTH DAKOTA IN 1979, NOW INCLUDES OVER 100 FARMERS FROM NORTH DAKOTA AND BORDERING STATES. THE PURPOSE OF THE SOCIETY IS TO GATHER AND SHARE INFORMATION THAT WILL ENABLE FARMERS IN THE NORTHERN PLAINS TO DEVELOP MORE SUSTAINABLE AGRICULTURE SYSTEMS ON THEIR OWN FARMS.

ON BEHALF OF THE NORTHERN PLAINS SUSTAINABLE AGRICULTURE SOCIETY, I APPEAL TO THE SUBCOMMITTEE TO INCLUDE $15 MILLION FOR THE AGRICULTURE PRODUCTIVITY ACT IN USDA'S FY1988 BUDGET.

BEFORE DISCUSSING THAT REQUEST, I WOULD LIKE TO NOTE, WITH GREAT SATISFACTION, THAT DURING THE CURRENT SESSION OF THE NORTH DAKOTA LEGISLATURE, THE NORTHERN PLAINS SUSTAINABLE AGRICULTURE SOCIETY WAS SUCCESSFUL IN CONVINCING THE NORTH DAKOTA STATE LEGISLATURE TO ESTABLISH STANDARDS AND VERIFICATION GUIDELINES FOR MARKETING CROPS AS ORGANICALLY GROWN. THIS NEW LAW WILL HELP PROTECT THE INTEGRITY OF THE LABEL "ORGANIC" FOR BOTH PRODUCER AND CONSUMER.

SINCE THE OBJECTIVES OF THE NORTHERN PLAINS SUSTAINABLE AGRICULTURE SOCIETY INCLUDE COOPERATION WITH REGENERATIVE AGRICULTURE ORGANIZATIONS IN OTHER STATES, AS WELL AS PROVIDING LEGISLATIVE INFORMATION THAT MAY EFFECT ORGANIC FARMING, WE HAVE BECOME ACQUAINTED WITH THE EFFORTS OF THE MIDWEST TECHNOLOGY DEVELOPMENT INSTITUTE, ALONG WITH OTHER COOPERATING GROUPS, TO SEEK FUNDING FOR LOW INPUT AGRICULTURE UNDER THE AGRICULTURE PRODUCTIVITY ACT.

FIRST, I WANT TO SAY THAT THE OBJECTIVES OF THE PROPOSED PROGRAM FOR LOW INPUT AGRICULTURE SYSTEMS ARE COMPLETELY CONSISTENT WITH THE AIMS OF THE NORTHERN PLAINS SUSTAINABLE AGRICULTURE SOCIETY. INCLUDED IN THOSE AIMS ARE: IMPROVING THE PROFITA-

BILITY OF AMERICAN FARMERS, ENHANCING ENVIRONMENTAL QUALITY IN AGRICULTURAL AREAS, AND CONSERVING VITAL NATURAL RESOURCES. THESE ARE EASILY THREE OF THE MOST CRITICAL NEEDS IN RURAL AMERICA TODAY AND THEY DESERVE THE IMMEDIATE ATTENTION OF THE U.S. SENATE.

EVERYONE IS AWARE OF THE FINANCIAL PLIGHT OF TODAY'S FARMERS. BUT NOT MANY ARE AWARE THAT CONTINUING DEPENDENCE ON PETROLEUM-BASED CHEMICAL INPUTS WILL FURTHER STRESS AMERICAN FARMERS SINCE THE COST OF THESE INPUTS WILL ESCALATE SHARPLY AS OUR PETROLEUM RESERVES BECOME DEPLETED. EVEN FEWER PEOPLE ARE AWARE THAT THERE ARE A NUMBER OF PROMISING WAYS OF FARMING PROFITABLY WITHOUT USING SUCH INPUTS, THEREBY DECREASING PRODUCTION COSTS.

GRADUALLY THE FACTS ABOUT THE EFFECTS OF 40 YEARS OF AGRICULTURE CHEMICAL ABUSE ARE SURFACING. CONTAMINATED GROUNDWATER, TOXIC RESIDUES, THE DEVELOPMENT OF CROPPING SYSTEMS THAT HAVE DRASTICALLY INCREASED SOIL EROSION AND SEDIMENTATION OF STREAMS AND LAKES, AND THE DEPLETION OF UNDERGROUND WATER RESERVES, ARE BUT A FEW OF THE ALARMING CONSEQUENCES THAT TAXPAYERS WILL HAVE TO FACE IN THE VERY NEAR FUTURE.

LOW INPUT AGRICULTURE SYSTEMS, WITH FULL ATTENTION TO SOIL AND WATER PROTECTION, WILL NOT ONLY HELP FARMERS IMPROVE THEIR PROFITABILITY BY REDUCING THEIR INPUT COSTS, BUT WILL ALSO SAVE TAXPAYERS MONEY BY FOSTERING A CLEANER ENVIRONMENT AND BY RESTORING THE HERITAGE OF HEALTHY AND PLENTIFUL SOIL AND WATER RESOURCES FOR FUTURE GENERATIONS.

SECOND, I WANT TO ENDORSE THE PROPOSED CONCEPT OF ADMINISTERING THE LOW INPUT AGRICULTURE SYSTEMS PROGRAM THROUGH REGIONAL COORDINATING CENTERS. WITH TODAY'S BUDGET DEFICITS IT WOULD BE IRRESPONSIBLE TO ESTABLISH PROGRAMS IN EVERY STATE. ON THE OTHER HAND, CENTRALIZING THE PROGRAM IN WASHINGTON WOULD PUT IT OUT OF REACH OF THE VERY FARMERS WHO NEED IT. CONSEQUENTLY, REGIONAL CENTERS, EFFICIENTLY ADMINISTERED, APPEAR TO US TO BE A GOOD WAY TO RUN THE PROGRAM.

I WANT TO UNDERSCORE THE FACT THAT IT WILL BE ABSOLUTELY ESSENTIAL TO BRING FARMERS FULLY INTO THIS PROGRAM. INVOLVING FARMERS ONLY IN AN ADVISORY OR CONSULTING CAPACITY WON'T DO. FARMERS NEED TO BE INCLUDED IN THE ACTUAL RESEARCH, DEMONSTRATION, AND TESTING. MANY OF US WHO HAVE ALREADY ADOPTED SUSTAINABLE AGRICULTURE METHODS HAVE ACCUMULATED A WEALTH OF KNOWLEDGE

THAT WILL BE ESSENTIAL TO THE NEW RESEARCH THAT IS NEEDED. FOR THAT REASON, TOO, IT WILL NOT DO TO SIMPLY TURN THIS TASK OVER TO THE LAND GRANT UNIVERSITIES. IF WE ARE TO MAKE RAPID PROGRESS IN LINKING THE PRACTICAL EXPERIENCE OF THE FARMER WITH THE SCIENTIFIC EXPERTISE OF THE RESEARCHER, THEN WE HAVE TO WORK TOGETHER, WITH THE EMPHASIS ON REAL-WORLD FARMING.

HAVING FARMED ORGANICALLY FOR ALMOST 10 YEARS MYSELF, HAVING WORKED CLOSELY WITH DOZENS OF OTHER FARMERS WHO ARE ALSO USING THOSE METHODS, AND HAVING TALKED WITH HUNDREDS OF FARMERS WHO WOULD LIKE TO SWITCH TO LOW INPUT FARMING TECHNIQUES, I AM KEENLY AWARE OF THE MANY AREAS WHERE WE NEED HELP. RESEARCH DOLLARS DURING THE PAST 40 YEARS HAVE BEEN SPENT ALMOST EXCLUSIVELY ON FINDING CHEMICAL SOLUTIONS. THE AGRICULTURE PRODUCTIVITY ACT CAN BE THE BEGINNING OF A MORE BALANCED APPROACH. WE KNOW THERE ARE SAFER, LONGER LASTING, MORE SUSTAINABLE ANSWERS TO SOME OF THE PROBLEMS FACING AGRICULTURE TODAY THAN THOSE OFFERED OUT OF THE RESEARCH OF THE PAST 40 YEARS.

WITH ADEQUATE FINANCIAL SUPPORT AND A MINIMUM OF BUREAUCRATIC INTERFERENCE, WE IN THE MIDWEST CAN MAKE A SUBSTANTIAL BEGINNING IN FINDING THOSE ANSWERS.

I BELIEVE THERE WILL ALSO BE A TREMENDOUS BENEFIT IN SHARING EXPERIENCE AND KNOWLEDGE BETWEEN FARMERS AND RESEARCHERS ACROSS STATE LINES. THE NORTHERN PLAINS SUSTAINABLE AGRICULTURE SOCIETY ALREADY MAINTAINS CLOSE WORKING RELATIONSHIPS WITH NUMEROUS FARM GROUPS DEVELOPING SUSTAINABLE AGRICULTURE METHODS, NOTABLY THE NEBRASKA SUSTAINABLE AGRICULTURE SOCIETY, THE MONTANA ALTERNATIVE ENERGY RESOURCES ORGANIZATION, AND THE MINNESOTA ORGANIC BUYERS AND GROWERS ASSOCIATION. I KNOW WE WOULD ALSO BENEFIT ENORMOUSLY FROM WORKING CLOSELY WITH EACH OTHER AND WITH LAND GRANT UNIVERSITY FACULTY AND STUDENTS IN THIS PROJECT.

IN SUMMARY, WE OF THE NORTHERN PLAINS SUSTAINABLE AGRICULTURE SOCIETY STRONGLY URGE YOU TO APPROPRIATE THE NECESSARY FUNDS TO ESTABLISH THIS IMPORTANT LOW INPUT AGRICULTURE PROGRAM.

STATEMENT OF DR. FREDERICK R. MAGDOFF

Good morning Mr. Chairman and Members of the Subcommittee on Appropriations. I am Fred Magdoff, Chairman of the Plant and Soil Science Department at the University of Vermont. My own expertise is in the area of soil fertility and chemistry.

The agricultural crises and upheaval that is felt most strongly in the Midwest is also apparent in Vermont. In the past year the whole herd buyout program plus "normal" attrition has resulted in about 10% of our dairy farms going out of business. The agricultural system is clearly not functioning well economically. It is also not functioning well environmentally. The reliance on single or two crop systems, synthetic pesticides for most pest problems, synthetic fertilizers for most soil fertility problems, routine addition of antibiotics to animal feeds to induce growth, etc. has resulted in numerous environmental problems across the United States. These include ground water and surface water pollution, soil erosion, widespread antibiotic resistant salmonella contamination of meat, and enhanced problems with insects, diseases and weeds. The proposed low-input agriculture research and extension effort would go a long way toward changing our course towards an agriculture that is sustainable from both economic and environmental viewpoints.

A group of us at the University of Vermont have made an effort to start rethinking and restructuring our agricultural teaching, research and extension programs. We have created an interdisciplinary undergraduate Alternative Agriculture curriculum. Much of the research effort within my Department is now along the lines of reducing purchased inputs as well as reducing environmental damage. Part of our approach has been to take full advantage of on-farm resources, including the management skills of the farmer. We have projects dealing with pest problems such as trapping insects, biological control of weeds, and use of integrated pest management for optimization of resource inputs. By using integrated pest management, our apple growers have significantly reduced their use of pesticides. I am sure the other projects will also lead to a decreased reliance on pesticides. A project which developed a low-input rotational grazing system has allowed dairy farmers to productively utilize "marginal" steep or stoney land to reduce their purchases of feeds during the growing season by 50 percent. In the soil fertility area we have developed a reliable soil test for predicting whether or not nitrogen fertilizer is needed for corn. We found that farmers , are frequently applying too much nitrogen as well as other fertilizers. One farm family in Richford, Vermont was using about $14,000 per year worth of nitrogen, phosphorus, and potassium fertilizer that wasn't needed.

I have described above some of our thinking and successes in Vermont. However, I must admit that we are not even scratching the surface of what we should be doing. For example, there is very little truly interdisciplinary research in Vermont (or in other states) that attempts to understand and creatively change an entire cropping or crop/animal sytem. We must encourage teams of scientists in the areas of plants, soils, animals, water, insects, weeds, economics, and sociology to work together. There is a long-established trend in science toward more specialized scientists working on more specialized problems. The academic reward system has encouraged this trend. Research support that mandates multidisciplinary attacks on broader problems is essential if we are to develop a more sustainable agricultural system.

Last month I gave a talk to about 100 farmers in the southwest counties of Vermont and from adjacent portions of New York. Dairy farmers are producing low-value crops (worth about $200 to $500 per acre) to feed their animals, and so I discussed the problems of growing low-value crops in the 1980s. I emphasized that we must apply what knowledge we already have to decrease unproductive inputs and get the full benefit of on-farm resources. For example, there is little reason for dairy farmers to buy much nitrogen fertilizer if they rotate corn crops with clover or alfalfa and use manure wisely. But we also know that we need more information. One farmer asked about controlling weeds in corn without herbicides - an area that we have some ideas about but have not been able to research. It is common for farmers to apply pesticides for "insurance." I discussed the sound economic and environmental reasons why pesticides should be applied only when there is a documented severe problem or a very great likelihood of a problem occurring. We must understand and manage the cropping systems better so that we don't need such a heavy reliance on pesticides. The numbers and types of questions I was asked at the meeting and the comments I received during and after the meeting indicated that I was discussing problems and approaches of immediate concern and interest to farmers.

You have the unique opportunity to play an important role in a major rethinking and redirection of U.S. agriculture. By providing new resources you will be able to stimulate researchers and extension workers to develop and transmit to growers new techniques and approaches to problems of an immediate and growing concern. You can help improve the economic well being of farmers and rural communities and, at the same time, help create a more healthy environment. I most strongly urge you to enthusiastically endorse the proposed appropriation for regional centers on low-input agriculture.

STATEMENT OF ROBERT RODALE

I am Robert Rodale, Chairman of the Board of Rodale Press, and President of the Rodale Institute. I am writing in support of the Agricultural Productivity Act and the need for more focused research on low-input farming technologies. Specifically, I am going to talk about the philosophy of regenerative agriculture and its implications for putting people, profit and biological permanence back into farming.

I am going to begin my testimony by talking about productivity. That is the key word in the Agricultural Productivity Act. America, today, is being forced to deal with the consequences of a farm productivity crisis. Those consequences include: overproduction, particularly of feed grains; excessive soil erosion and silting of waterways; pollution of groundwater with fertilizer and pesticide residues; reduction in employment opportunities in farming; and a frightening deterioration in the entire financial structure of agriculture.

The result is that both farmers and consumers are beginning to fear American agriculture, rather than see it as a source of national strength. Non-farmers now fear the tax burden that support of the present system places on their shoulders. They fear, also, the draining away of national strength that soil erosion and pollution symbolize.

Farmers, above all, fear that the way of life they love will collapse around them, forcing them off the land. Farmers lack the option of switching easily -- either permanently or temporarily -- to a farming system which works well with very low levels of inputs, yet which still would provide reasonable levels of production permanently, while reducing soil erosion and groundwater problems.

Think for a moment about how today's farmer is locked into an energy- and chemical-intensive production system. For the past two decades, energy was unrealistically cheap and farmers came to rely almost exclusively on purchased nitrogen fertilizer and herbicides. Now, many farmers are finding they can no longer afford those chemicals, either financially or environmentally.

Soluble nitrogen fertilizers and chemical herbicides are showing up in drinking water wells on more and more farms and even in cities around the country. Yet the crop nutrients and weed control that farmers need are already to be found in non-polluting forms in the "free" internal resources of farms throughout the United States. The air is loaded with nitrogen, which can be captured in the soil through use of legumes, weed-controlling crop rotations and overseeding, which increasing numbers of farmers are incorporating into their farming systems.

I call farmers who are making better use of their internal resources "regenerative" farmers, because they are actually improving our resource base while using it. They are producing good crops, while spending less -- and making more. True to the regenerative philosophy, most regenerative farmers do more than just use their internal resources more intensively. They use them in ways that actually strengthen and purify those resources.

How? In scientific terms, by taking full advantage of the efficiencies of what agronomists call "biological structuring." Briefly, that structuring totally integrates a wide variety of sophisticated production methods. It minimizes the need for usually purchased external inputs, while maximizing the use of free internal resources. The chart following this letter (Appendix A) compares the major internal resources of a regenerative agriculture system with conventional farming based largely on external inputs.

A classic example of biological structuring is what scientists call "nutrient cycling," a closed system within a system which keeps a high level of native crop nutrients on the farm. While nutrient cycling is most commonly associated with composting and otherwise recycling crop residues or animal manure, it can take vastly different forms. Picture this:

A farmer growing a legume crop like red clover harvests the clover seed. By simply overseeding the legume into a standing crop like corn, the farmer greatly reduces or even eliminates the need for purchased nitrogen fertilizer for next year's crop. That's because the legume, in partnership with free-living, nitrogen-fixing organisms in the soil, captures nitrogen from the air and makes it available to crops in generous amounts. But the benefits of overseeding don't stop there. By cutting fertilizer use, it reduces the amount of chemicals being discharged into the environment and lessens the likelihood of groundwater pollution. It also:

- Significantly reduces soil erosion by keeping the ground covered.
- Conserves soil moisture, reducing the need for irrigation and the threat of drought.
- Pumps phosphorus, potassium and secondary nutrients up from lower soil layers, again reducing the need for purchased fertilizers.
- Helps choke out weeds, which, in turn, reduces the need for chemical herbicides and decreases the potential for environmental pollution.
- Increases soil organic matter levels, when mowed or plowed down as a green manure. This improves soil structure. Rainfall soaks into the soil, rather than running off and carrying precious topsoil, nutrients and chemicals with it.
- Disrupts insect cycles -- reducing both the need for insecticides and the risk of pollution caused by crop chemicals -- when used as one of a variety of crops in a crop rotation.
- Provides grazing for livestock, which convert grain and fodder into meat, milk, eggs and other value-added products.
- Cuts the farmer's production costs and boosts net income. This helps keep the farm in a business, stimulating economic activity throughout the local community.

Regeneration is proving workable -- and profitable, for man and the environment -- on more and more farms throughout the United States and the world. The ambitious idea of regenerative agriculture has now made the transition from being merely a thought to actually being a practical system enjoying increasing use. That system is providing workable, lasting solutions to challenges such as preserving and regenerating our soil, halting environmental degradation, reducing the need for government subsidies and lowering farmers' production costs, while maintaining productivity and increasing profitability.

For many years, though, about the only source of practical information on lower-input farming systems came from our 305-acre Rodale Research Center in Maxatawny, PA., our various books and magazines like The New Farm, and a handful of truly innovative university researchers and Extension agents responding to the most pressing needs of farmers.

More recently, the Rodale Research Center and the Rodale Institute have entered into collaborative projects with USDA's Agricultural Research Service and a growing number of land grant universities. Just this past January, The Rodale Institute co-sponsored a conference on low-input farming systems at the Johnson Foundation's Wingspread Conference Center in Racine, WI. The conference brought together administrators from 14 land grant universities, state experiment stations and USDA for two days to begin planning a regionally developed, national agenda for needed new research.

In addition, the Rodale Institute recently established a network of 13 on-farm research and demonstration sites that represent a wide geographical mix and a variety of farming enterprises in Ohio, Minnesota, Michigan, Missouri, Illinois, Wisconsin, Iowa, Indiana, Maryland, Pennsylvania and Nebraska. These are working farms where area farmers can come to see demonstrations of various components of low-input farming systems in the field, and exchange information and ideas with fellow farmers, Extension agents, soil and water conservationists and area agricultural scientists.

Our on-farm cooperators were largely selected from the more than 1,500 low-input farmers surveyed by The New Farm. The vast majority of those farmers report they are making just as much -- and often more money -- since they began reducing the use of purchased inputs and relying more on the internal resources of their own farms. In many cases, they say this change in farming practices has saved them from going out of business. About the only regret they have is that they did not adopt low-input farming methods years earlier.

Farmers tell us it is not at all uncommon for them to save $25 to $30 or more per acre on fertilizer, alone. Equal savings are reported on herbicides. While input costs are reduced dramatically, their crop yields remain about the same or actually improve, depending largely on the weather. One of the best examples of this is Richard and Sharon Thompson, who farm 300 acres near Boone, IA. Ridge-tilling corn and soybeans in rotation with oats, hay and pasture has allowed them to completely eliminate herbicides from their farm. They consistently produce good yields of corn for about $95 less per acre, and soybeans for about $45 less per acre than the Iowa State University production averages.

One thing holding back many farmers who want to reduce their input use is the serious lack of region-specific scientific information on how to successfully make such changes. In January and February of this year, the Rodale Institute held a series of workshops on low-input farming systems at Bloomington, IL; Jackson, MI; Mankato, MN; and Terre Haute, IN. More than 250 farmers attended. Their recommendations for priorities to our agricultural administrators and researchers over the next five to ten years included researching production systems that do not require heavy chemical use, biological weed and insect control, breeding or selection of plants and animals that function well in low-input systems, new marketing and grading systems based on nutritional quality that would command higher prices for farmers, improved delivery of information on low-input farming systems, and greater farmer involvement in the research process.

During the '80s, as production costs continued to rise and commodity prices steadily fell, the land grant universities cautiously began responding to farmers' needs by initiating new research. These studies are variously aimed at reducing the use of fertilizer, herbicides and other purchased inputs, safeguarding the environment and improving the profitability of our farms. A total of seven universities now have new research projects clearly labeled as being "alternative" or "low-input." They are studying important areas like the role of legumes in rotations, biological weed control, nitrate carryover and fertilizer management.

The University of Vermont even has a new, inter-disciplinary agricultural curriculum that leads to a bachelor of science degree in sustainable agriculture. Other universities conducting or proposing new research in this area include Iowa State University, Michigan State University, the Wye Research and Education Center of the University of Maryland, North Carolina State University, Pennsylvania State University, the University of Nebraska, the University of Kentucky, the University of California, the University of Wisconsin and the University of Minnesota. As commendable as they may be, scientists at the different universities admit these efforts are barely scratching the surface of the new discoveries that await us. Fortunately, they and many other scientists at land grant and non-land grant agricultural institutions and state experiment stations are poised to move much further in this new direction, as official policy is formulated and funding and other resources become available.

The catalysts for this emerging new paradigm for our agricultural sciences include the farmer, himself, the continued economic depression in U.S. agriculture, growing concern among farmers and non-farmers over groundwater pollution from agricultural chemicals, and the record costs of our federal farm programs.

Significantly reducing farmers' production costs is crucial to surviving in agriculture during the rest of the century. That is why I support the Agricultural Productivity Act and urge you to appropriate all the funds necessary to implement its provisions for new research on low-input agricultural systems. I am convinced that this vital new research will soon begin restoring profitability to farms throughout the United States, and lessen the financial burden on the federal government. At the same time, it will help safeguard our groundwater and other natural resources, and contribute significantly toward better health and safety for both farmers and non-farmers. Unlike some past efforts, the Agricultural Productivity Act calls for a regional approach to research, and truly democratic and regional organization and budgeting. Primary emphasis in implementation would come from area scientists and farmers, forming a new partnership between land grant and non-land grant universities, state experiment stations, Extension and the private sector. As the name of the Agricultural Productivity Act implies, this is a partnership that will be truly productive -- and profitable -- for all concerned.

[APPENDIX A]

FOR AGRICULTURAL PRODUCTION

INTERNAL	EXTERNAL
SOIL	HYDROPONIC MEDIUM
SUN - main source of energy	SUN - energy used as "catalyst" for conversion of fossil energy
WATER - mainly rain and small irrigation schemes.	WATER - increased use of large dams and centralized water distribution systems.
NITROGEN - collected from air and recycled	NITROGEN - primarily from synthetic fertilizer
MINERALS - released from soil reserves and recycled	MINERALS - mined, processed, and imported
WEED & PEST CONTROL - biological & mechanical	WEED & PEST CONTROL - with pesticides
ENERGY - some generated and collected on farm	ENERGY - dependence on fossil fuel
SEED - some produced on-farm	SEED - all purchased
MANAGEMENT DECISIONS - by farmer and community	MANAGEMENT DECISIONS - some provided by suppliers of inputs
ANIMALS - produced synergistically on farm	ANIMALS - feed lot production at separate location
CROPPING SYSTEM - rotations and diversity enhance value of all of above components	CROPPING SYSTEM - monocropping
VARIETIES OF PLANTS - thrive with lower moisture and fertility	VARIETIES OF PLANTS - need high input levels to thrive
LABOR - most work done by the family living on the farm	LABOR - most work done by hired labor
CAPITAL - initial source is family and community; any accummulation of wealth is reinvested locally	CAPITAL - initial source is external indebtedness or equity, and any accummulation flows mainly to outside investments

STATEMENT OF DICK THOMPSON

MY NAME IS DICK THOMPSON, A FARMER FROM BOONE, IOWA. I AM WRITING IN SUPPORT OF APPROPRIATING THE AGRICULTURAL PRODUCTIVITY ACT AND LOW-INPUT AGRICULTURE RESEARCH.

I WOULD LIKE TO TELL YOU WHAT HAS HAPPENED ON OUR FARM AND ALSO EXPLAIN THE LOW-INPUT AGRICULTURAL TECHNOLOGY SYSTEM. I WILL DIVIDE THE MATERIALS INTO THREE CATEGORIES.

1. A PROFITABLE-ENVIRONMENTAL SOUND FARMING SYSTEM MODEL.
2. ON-FARM EXPERIMENTAL DESIGN.
3. APPROPRIATE LOW-INPUT TECHNOLOGY TRANSFER.

CATEGORY 1.

A. FALL COVER CROPS: OATS AND HAIRY VETCH ARE AERIAL SEEDED OVER SOYBEANS IN EARLY SEPTEMBER TO REDUCE SOIL EROSION, PRODUCE NITROGEN FROM THE AIR FOR NEXT YEARS'CORN CROP, REDUCE COMPACTION AND IMPROVE SOIL STRUCTURE, INCREASE THE EARTHWORM POPULATION AND PRODUCE ALLELOPATHIC PHTOTOXINS TO HELP CONTROL WEEDS THE NEXT SPRING.

B. PROPER MANURE MANAGEMENT: ANIMAL MANURES AND CITY SLUDGE ARE BEING STORED IN A CONCRETE BUNKER AND THEN APPLIED JUST PRIOR TO PLANTING FOR THE BEST AGRONOMIC, ECONOMICAL AND ENVIRONMENTAL PRACTICES.

C. NO PRE-PLANT TILLAGE WITHOUT HERBICIDES: THE RIDGE-TILL PLANTER CAN REMOVE THE COVER CROP, PUSH SOIL TO COVER THE MANURE AND PLANT THE NEW CROP WITHOUT STIRRING UP A WEED PROBLEM. THE WEEDS ARE CONTROLLED BY ROTARY HOEING AND CULTIVATION AFTER THE CROP IS PLANTED. A COMBINATION OF THESE TECHNOLOGIES AND OTHERS WILL INCREASE PROFITS $95.00 PER ACRE ON CORN AND $45.00 ON SOYBEANS.

D. ROTATIONS: C-SB-C-O-H, C-SB-O-M-M-M ROTATION WITH LIVESTOCK. O/GM-C-SB, C-SB ROTATION WITH LIMITED INPUTS.

E. LIVESTOCK: A COW-CALF BEEF HERD AND A FARROW TO FINISH HOG ENTERPRISE ARE BEING MAINTAINED WITHOUT THE USE OF DRUGS OR ANTIBIOTICS IN THE FEED OR WATER. NO VACCINATIONS ARE USED.

DETAILS ABOUT THESE SYSTEMS ARE FOUND IN THE PAPER ENTITLED "REGENERATIVE AGRICULTURE THOMPSON ON-FARM RESEARCH".

DRAINAGE WELLS WERE DUG IN IOWA YEARS AGO TO DRAIN THE SWAMPLAND SO THE LAND COULD BE FARMED. THESE DRAINAGE WELLS TAKE SURFACE WATER DIRECTLY TO UNDERGROUND AQUIFERS. PESTICIDES USED IN MODERN AGRICULTURE ARE NOW GOING DIRECTLY INTO IOWA'S DRINKING WATER SUPPLY. THE IOWA LEGISLATURE PROPOSES TO CAP THE WELLS. THESE FARMERS WITH DRAINAGE WELLS SAY THAT THEIR FARMS WILL BE DESTROYED AND WILL RETURN TO SWAMPLAND. IOWA TAXPAYERS DO NOT WANT TO BUY UP SWAMPLAND. THESE FARMERS DO NOT HAVE THE VAST AMOUNTS OF MONEY TO CHANNEL OR TILE DRAIN THEIR FIELDS. AN ALTERNATIVE WOULD BE TO FARM WITHOUT PESTICIDES AS EXPLAINED IN THE ABOVE MATERIAL.

CATEGORY 2:

AGRICULTURE NEEDS APPROPRIATE RESEARCH IN PROFITABLE-ENVIRONMENTAL SOUND FARMING SYSTEMS. IF THERE ARE NO NEW MONEYS, THEN THERE MUST BE A CHANGE IN THE PRIORITIES OF HOW THE AVAILABLE MONEY IS TO BE SPENT.

WE NEED ALTERNATIVES IN FARMING, THE SAME IS TRUE IN RESEARCH. I BELIEVE LOWER COST TECHNIQUES ARE A PARTIAL SOLUTION TO AGRICULTURE PROBLEMS. ALSO LOWER COST TECHNIQUES ARE NEEDED IN THE RESEARCH ESTABLISHMENT SO THAT THE ECONOMIC-ENVIRONMENTAL PROBLEMS CAN BE ADDRESSED NOW.

ONE WAY IS TO SUPPLEMENT (BASIC) UNIVERSITY RESEARCH WITH (APPLIED) ON-FARM RESEARCH. THIS IS A COMPLIMENTARY, CO-OPERATIVE (NOT COMPETITIVE) EFFORT BETWEEN FARMERS, EXTENSION AND RESEARCHERS. FARMERS, WITH THE HELP OF EXTENSION AND RESEARCHERS, CAN DO APPLIED RESEARCH TEST STRIPS ON THEIR OWN LAND. THE NARROW SIDE BY SIDE COMPARISONS THAT GO ACROSS THE FIELD CAN BE MACHINE PLANTED AND HARVESTED WITH VERY SMALL COSTS. ELECTRONIC SCALES ON COMBINES AND WEIGH WAGONS MAKE EVERY FARM A POSSIBLE RESEARCH SITE. THESE RANDOMIZED AND SIX REPLICATED TREATMENTS CAN BE ANALYZED STATISTICALLY. THESE DETAILS ARE EXPLAINED IN THE PAPER ENTITLED "A FARMERS APPROACH TO ON-FARM DESIGN". THIS DESIGN IS BEING USED ON TEN ON-FARM RESEARCH AND DEMONSTRATION LOCATIONS THROUGHOUT THE MIDWEST. THE STATES INCLUDE OHIO, INDIANA, ILLINOIS, IOWA, NEBRASKA, MISSOURI, MINNESOTA, WISCONSIN AND MICHIGAN. THIS WORK IS BEING SPONSORED BY THE RODALE INSTITUTE. PRACTICAL FARMERS OF IOWA WILL USE THIS DESIGN OF 13 ON-FARM RESEARCH AND DEMONSTRATION LOCATION THROUGHOUT IOWA IN 1987. EIGHT STUDENT INTERNS FROM FOUR IOWA COLLEGES WILL CO-OPERATE

IN THIS PROJECT. PRACTICAL FARMERS OF IOWA AND THE CENTER FOR RURAL AFFAIRS FROM NEBRASKA HAVE BEEN ASKED BY IOWA STATE AND NEBRASKA UNIVERSITIES TO CO-OPERATE IN LOW-INPUT RESEARCH.

THE LAND STEWARDSHIP PROJECT IN MINNESOTA WILL HAVE 25 DEMONSTRATION FARMS STARTING IN 1988. WISCONSIN RURAL DEVELOPMENT CENTER WILL ALSO BE SELECTING ON-FARM SITES IN THE NEAR FUTURE.

WHY ALL THE EMPHASIS ABOUT ON-FARM RESEARCH? PIONEER HYBRID SEED COMPANY DID A SURVEY OF 1000 MIDWEST FARMERS WHICH SAID THAT FARMERS ARE ASKING FOR CONVINCING RESULTS THAT THEY CAN SEE ON NEAR BY FARMS. FARMERS WANT UNBIASED RESULTS AND PREFERABLY TESTS DONE BY FARMERS.

CATEGORY 3:

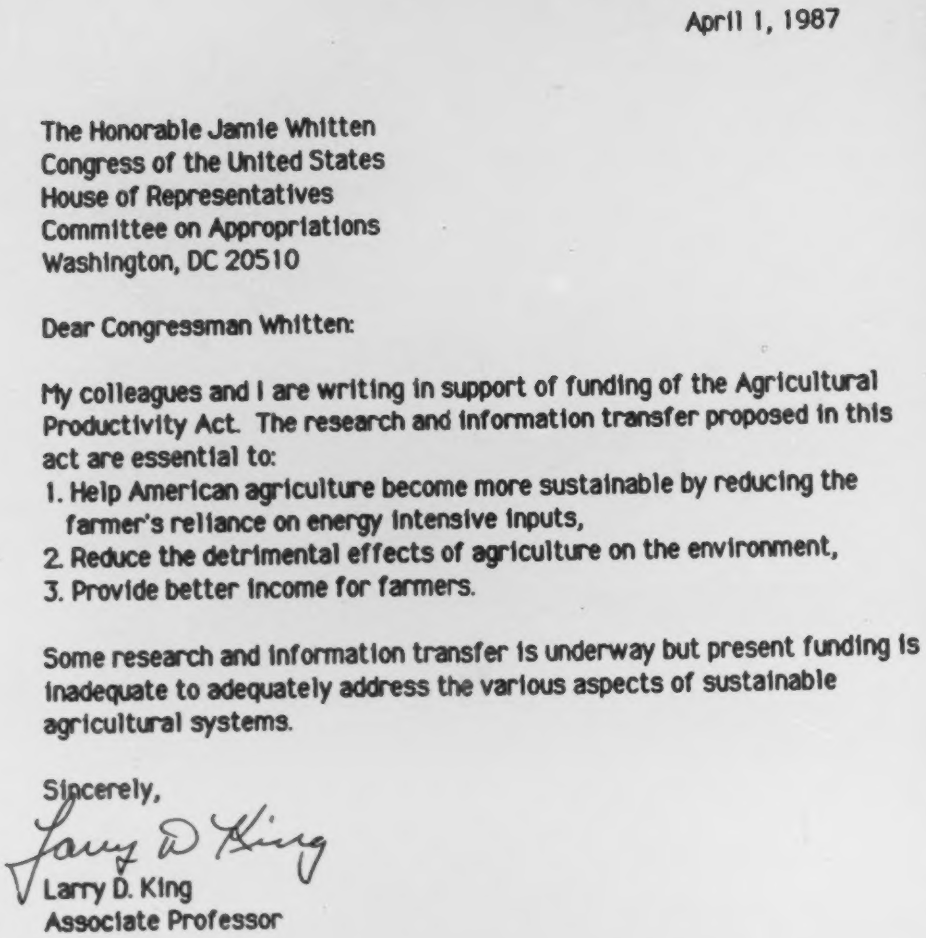
TECHNOLOGY TRANSFER FOR ON-FARM RESULTS CAN BE THROUGH FIELD DAY BOOKLETS, EXAMPLE: THE THOMPSON FARM-NATURE'S AG SCHOOL. HANDOUTS ARE PICKED UP DURING SLIDE PRESENTATIONS AT WINTER WORKSHOPS. THE NEW FARM MAGAZINE, PRACTICAL FARMER NEWSLETTER, IOWA RESOURCE FARMING PROJECT AND OTHERS WILL DISTRIBUTE THIS INFORMATION. ALTERNATIVE AGRICULTURE NEWS, ALTERNATIVE AGRICULTURE RESOURCES REPORT, AMERICAN JOURNAL OF ALTERNATIVE AGRICULTURE ALL ARE PUBLISHED BY THE INSTITUTE OF ALTERNATIVE AGRICULTURE AND IS ANOTHER MEANS OF LOW-INPUT INFORMATION TRANSFER. THE MAJOR NEWSPAPERS AND MAGAZINES ARE BECOMING MUCH MORE INTERESTED IN LOW-INPUT TECHNOLOGIES THAT ARE PROFITABLE AND ENVIRONMENTALLY SOUND.

THE NATIONAL ACADEMY OF SCIENCES, NATIONAL RESEARCH COUNCIL BOARD OF AGRICULTURE IS PRESENTLY DOING A STUDY OF ALTERNATIVE FARMING SYSTEM IN MODERN PRODUCTION AGRICULTURE. OUR FARM IS ONE OF THE CASE STUDIES IN THIS REPORT.

SHARON AND I HAVE MADE 37 PRESENTATIONS IN 1986 TO OVER TWO THOUSAND PEOPLE. THE EIGHTEEN TOURS AT OUR FARM WERE ATTENDED BY 770 PEOPLE DURING THE SAME YEAR.

THE AVAILABLE TECHNOLOGIES OF THE 1960-70 THAT USED MORE INPUTS MADE OVERPRODUCTION EASY. COMMERCIAL INTERESTS HELPED PROMOTE THIS INCREASED PRODUCTION. EVERYBODY IS IN AGREEMENT NOW THAT PRODUCTION HAS TO BE DOWN SIZED. THESE COMMERCIAL INTERESTS WILL NOT BE THERE TO PROMOTE REDUCED INPUTS. THAT IS WHY THE GOVERNMENT IS NECESSARY TO ENCOURAGE LOW-INPUT, PROFITABLE, ENVIRONMENTALLY SOUND AGRICULTURE. THERE IS A NEED FOR ALL THE VOICES IN AGRICULTURE TO SAY THE SAME MESSAGE.

LETTER FROM LARRY D. KING



April 1, 1987

The Honorable Jamie Whitten
Congress of the United States
House of Representatives
Committee on Appropriations
Washington, DC 20510

Dear Congressman Whitten:

My colleagues and I are writing in support of funding of the Agricultural Productivity Act. The research and information transfer proposed in this act are essential to:

1. Help American agriculture become more sustainable by reducing the farmer's reliance on energy intensive inputs,
2. Reduce the detrimental effects of agriculture on the environment,
3. Provide better income for farmers.

Some research and information transfer is underway but present funding is inadequate to adequately address the various aspects of sustainable agricultural systems.

Sincerely,

Larry D King

Larry D. King
Associate Professor

SUBCOMMITTEE RECESS

Senator BURDICK. At this time, we will recess. We will continue this afternoon with congressional and public witnesses in this room at 1 o'clock.

[Whereupon, at 11:55 a.m., Wednesday, April 8, the subcommittee was recessed, to reconvene at 1 p.m., the same day.]

(AFTERNOON SESSION, 1 O'CLOCK, WEDNESDAY, APRIL 8, 1987)

NONDEPARTMENTAL WITNESSES

SUBCOMMITTEE PROCEDURE

Members present: Senators Burdick and Grassley.

Senator BURDICK. The subcommittee will please come to order.

This afternoon, we conclude our hearings on the appropriations for the Department of Agriculture and Related Agencies.

We appreciate your appearing before the committee to give us your thoughts on the agencies under our jurisdiction. Your comments will be helpful to us as we work to appropriate funds for these agencies.

I must remind the witnesses that the subcommittee cannot receive any copyrighted material for publication unless arrangements have been made in advance to obtain the permission of the copyright owner that those materials be included in the hearing transcript. This notice is given to protect copyright owners, as well as the subcommittee and witnesses.

I also want to remind the witnesses that we have a large number of witnesses and, therefore, have to limit the time for testimony. The statements of each witness will be made a part of the hearing record in full. Therefore, you are asked to summarize your testimony if it is lengthy. Each witness will be allowed 5 minutes for oral comments and it will be appreciated if you keep your eye on the stoplight up here and comply with the limitation.

The first witness will be the Honorable John H. Glenn.

Welcome to the committee.

CONGRESSIONAL WITNESS

STATEMENT OF HON. JOHN H. GLENN, U.S. SENATOR FROM OHIO

Senator GLENN. Thank you very much, Mr. Chairman.

It is a pleasure to testify before your subcommittee on the 1988 fiscal year appropriation for the Department of Agriculture. I would like to ask that my entire statement be included in the record, and I will give a summarized version of it here.

We all know what has happened to farm income, and some of the details of that, and the figures that go with it, and the decline in export. Demands for food can only go so far, and that is what agriculture is all about.

Last session, I introduced and successfully included in the 1985 farm bill a new program to develop new uses for farm and forest products.

However, the administration has not yet provided funding for the program.

Mr. Chairman, I believe that new uses research is a commonsense approach to the bin-busting surpluses facing Americans in the eighties and we should really get on with it. We have done amazing things with research in a lot of different fields, including agriculture.

New uses for farm and forest products are not far off fantasies that will take years to develop. Right now, corn starch is being used not just in producing alcohol, but also in manufacturing paper products, building materials, textiles, and adhesives. In my judgment, we have just begun to scratch the surface in this area.

Many petrochemicals can be made from carbohydrates contained in food and feed grains. More efficient manufacturing processes need to be developed. Even greater potential lies in developing new chemicals and other products that utilize the desirable properties of starch and cellulose.

The new uses research program encourages the application of basic research in biology, chemistry, and physics to develop new uses for farm and forest products. Although some limited research is being conducted by USDA, land grant colleges, and private industry, the amount spent in comparison to production research is just minimal.

To give you an example, last year, fiscal year 1987, only $6 million out of a total Agricultural Research Service budget of $510 million was spent on developing new uses for food and feed grains. Expenditures on new nonfood uses of food products pales beside the money being spent on production research.

The research people have been so good in agricultural research that we have just tremendous surpluses, that is one of our problems. They have done a great job in analyzing soils, fertilizers, and hybrids, all sort of things that we are aware of in the research program that have given us production that is the envy of the rest of the whole world. It has outstripped the demand for its products. Supply is being created without the markets to absorb it.

To right this imbalance, I would urge strongly that you recognize the potential that exists for new nonfood uses from food products. I would note that with a concerted effort, I believe that some of this potential can be realized in the not too distant future.

However, a strong federal commitment to new uses research must be made. This can be accomplished first by providing the funding authorized in the new uses research program that was passed last year. Not less than $10 million per year is certainly a minimal amount.

Not less than $10 million per year was earmarked, although it was never funded, for this research program in the 1985 farm bill. I would like to ask that you include $50 million in the fiscal year 1988 funding for new uses research. This would represent only about 10 percent of the total ARS research budget.

We are still production oriented at a time when we have surpluses, and I believe it is time to redirect our agricultural research. I want to take some of this talent that ARS has, which they have used in production, and I compliment that, to apply to new uses of agricultural products other than food. It seems so basic to me because there is such a tremendous potential there to do that.

This program does not offer short-term help to farmers, but it is a long-term strategy to return profit to agriculture, and to create the base for a third golden age of agriculture. I believe that such forward-looking strategies are the key to renewing America's agricultural prosperity and restoring our farmers' confidence in the future. I look forward to that future and working with you, Mr. Chairman to shape it.

Thank you very much for this opportunity, and I hope that even this tiny percentage of the research budget will go to nonfood uses because there is such a tremendous potential there. We just can't force everybody to eat more to eat up the surpluses, but there are 1,000 things that may come out of this new uses research. I would urge that the funding be set at the $50 million level.

Senator BURDICK. Thank you very much.

Senator Grassley.

Senator GRASSLEY. Thank you very much, Senator.

I don't have any questions, but I suppose I should have. I appreciate your backing, because what you said will be very popular in my state as well.

Senator GLENN. We have had a very favorable response from your state, and from you personally last year when we passed the new uses research program. We only asked for $10 million last year, but that was never funded. So it never got off the ground, it is just sitting there authorized.

The more I think about it, it just makes such common sense to me, while we have bin-busting surpluses out there, and we have been so good in our production research, but we have never gone the next mile, to find new uses. I would like to see that become more efficient, and more competitive than it is now.

We have an ethanol plant in South Point, OH, that is supposed to use some 24 million bushels of Ohio corn each year, but because the price remains higher than gasoline, it has never been able to use nearly that amount, but this is just one example of what we can do if we do some basic research.

Let's just break this stuff down into starches and carbohydrates, and see what we can do with it. We just haven't done the research. We have to take some of that production research money, and put it into new uses, we may make a breakthrough that would use tremendous amounts of our surpluses.

Senator BURDICK. Thank you for very interesting testimony.

Senator GLENN. Thank you, Mr. Chairman.

[The statement follows:]

STATEMENT OF SENATOR JOHN GLENN

Mr. Chairman, it is a pleasure to testify before your subcommittee on the 1988 fiscal year appropriations for the Department of Agriculture. Before beginning my prepared remarks, let me commend you and the Agriculture Subcommittee for your extensive hearings on the agriculture appropriations request. Your work is instrumental in maintaining a strong federal commitment to agriculture.

Mr. Chairman, the 1980's have not been kind to U.S. agriculture. Prices have declined, forcing income lower. Land values have declined, forcing thousands of farmers out of business. Unfortunately, this situation probably will not improve in the near future. As a result we must provide short-term aid to address our current problems as well as devise a long-term strategy which will return profit to agriculture.

History tells us that farm prosperity occurs when demand for agricultural commodities is in balance with supply. Beginning in the mid 1950's, an expanding export market absorbed the increasing supply of commodities produced by U.S. farmers. While not every year was profitable for every farmer, on balance the period between 1955 and 1980 was one of acceptable income for the farm sector as a whole.

Since 1981 farm exports have declined from $44 billion to an estimated $26 billion in 1986. During this same period domestic demand for food has increased, but only at the relatively slow rate of population growth. Extension of these trends yields a sobering conclusion—traditional demand outlets show little promise to utilize the current surpluses and restore prosperity to American farm families.

Even the possibility this prediction may be accurate should challenge us to develop bold, new programs which look to the future while embracing the lesson from history that farm prosperity is led by demand. That is why, I introduced and successfully included in the 1985 farm bill a new program to develop new uses for farm and forest products. However, the administration has not yet provided funding for the program. I believe new uses research is a commonsense approach to the bin busting surpluses facing Americans in the eighties.

New uses for farm and forest products are not far off fantasies that will take years to develop. Right now, corn starch is used not just in producing alcohol but also in manufacturing paper products, building materials, textiles, and adhesives.

And, in my judgment, we have just begun to scratch the surface. Many petrochemicals can be made from carbohydrates contained in food and feed grains. However, more efficient manufacturing processes need to be developed. Even greater potential lies in developing new chemicals and other products that utilize the desirable properties of starch and cellulose.

The new uses research program encourages the application of basic research in biology, chemistry, and physics to develop new uses for farm and forest products. Although some limited research is being conducted by USDA, land grant colleges, and private industry, the amount spent is minimal. For example, in fiscal year 1987 only $6 million out of a total Agricultural Research Service budget of $510 million was spent on developing new uses for food and feed grains. Expenditures are new nonfood uses of food products pales beside the money being spent on production research. This imbalance is one reason that U.S. agriculture's productive capacity has outstripped the demand for its products. Supply is being created without the markets to absorb it.

To right this imbalance I urge you to recognize the potential that exists for new nonfood uses from food products. And I would note that with a concerted effort some of this potential can be realized in the not too distant future. However, a strong federal commitment to new uses research must be made. This can be accomplished first by providing the funding authorized in the new uses research program. Not less than $10 million per year was earmarked for this research program in the 1985 farm bill. I ask that you include $50 million in fiscal year 1988 funding for new uses research. This would represent only about 10 percent of the total ARS research budget.

This program does not offer short-term help to farmers. It is a long-term strategy to return profit to agriculture and to create the base for a third golden age of agriculture. Such forward looking strategies are the key to renewing America's agricultural prosperity and restoring our farmers confidence in the future. I look forward to that future and working with you, Mr. Chairman, to shape it.

My thanks for this opportunity to testify.

SOIL CONSERVATION SOCIETY OF AMERICA

STATEMENT OF NORMAN BERG

Senator BURDICK. Our next witness this afternoon will be Mr. Norman Berg for the Soil Conservation Society of America.

Mr. BERG. Thank you, Mr. Chairman. It is good to be back in front of the committee, and to see in your position.

The Soil Conservation Society of America, as you know, appreciates the invitation to give testimony on the fiscal year 1988 budget for soil, water activities at USDA. I appreciate that our prepared statement will be made part of the record.

For over 40 years, our society has been dedicated to the advancement of science and art of good land use, and so has this committee. The administration's proposed budget for the next fiscal year is an affront to the intelligence of this committee, and to the future of soil conservation work that is being carried out in this country. It is an insult to those USDA agencies that are concerned and dedicated to conservation work, and the technical and financial assistance, research and extension.

It seems also to be out of step with the policies of the past. It would seem most unreasonable to expect the termination of the 18 long-term ASCS and SCS activities that have been in place over a long period of time in support of the local participants.

We are pleased that there can be action in the 1987 supplemental funding measure that could provide some needed additional technical help, which is going to be very important to the work that is committed to the conservation reserve program, and the other conservation features sanctioned by the Food Security Act of 1985.

There is a new and challenging workload, obviously, that needs to be met, and the SCS is even now working at almost 1,000 staff-years below their authorized level of 14,377 staff-years. SCS should be working on the implementation of the conservation provisions of the farm bill, but not at the expense of the traditional programs that have at least four or five decades of history. We don't think that it should have to be an either/or proposition.

I would also like to put in a word for conducting additional research, if at all possible, on what has been identified as alternative agriculture, or low-input agricultural systems, with the opportunity, perhaps, to increase profitability.

Perhaps, some of the low-input agricultural work that is now underway could be further researched, and we could build on that which is already proven. The implementation of such a program could effectively utilize $15 million a year over at least the next 5 years.

Finally, our society recommends that the agencies that have the responsibility for the USDA conservation activities be protected and be continued through fiscal year 1988 as you have done in the past. We would prefer to see major increases for soil conservation, but that is neither likely nor responsible in an age of deficit.

Mr. Chairman, we are not happy with the fiscal year 1988 budget for the agencies that we talked about. We feel that our suggestions for improvement are marginal and workable. We have included a table, which analyzes the needs in terms of what is available in fiscal year 1987 compared to the administration's proposals, and what our recommendations would be.

There are three areas that I have starred. One is the technical assistance that will be needed to carry the traditional programs plus the new responsibilities of the Food Security Act. The staff-years need to be adjusted if that is needed, and we need to be certain to fund the contracts that we have made through the conservation reserve program, and the commitment to those land users, over 150,000.

I appreciate the chance to be a witness, and I will be available to answer any questions that you may have.

Thank you very much, Mr. Chairman.

Senator BURDICK. Thank you.

According to the Soil Conservation Service, the request to substantially increase funding is unworkable because there are not enough personnel with expertise to hire to carry out the work. In addition, the people who are there are not necessarily in the right place. What do you make of that?

Mr. BERG. I don't think that this is exactly right. I think that there is a limit to what we should do in terms of building the federal work force in this regard.

This is going to be a workload that has to be addressed very, very much in terms of field conditions that will be very demanding over the next couple of years. I think a lot of this work could be done if the work is properly managed on the basis of temporary or part time assistance, especially through the nonfederal support that is building in this area, the state and county work.

In the Conservation Districts there are people who have very recently retired from the Soil Conservation Service, and others, who are interested and are able to carry out the conservation work, who could be brought in to do some of this on a very short-term basis.

Senator BURDICK. Thank you very much.

Mr. BERG. Thank you, Mr. Chairman. It was nice to see you again.

[The statement follows:]

STATEMENT OF NORMAN A. BERG

I am Norman A. Berg,Washington Representative for the Soil Conservation Society of America.This is my fifth year in this role,after forty years as a USDA-SCS civil servant. Our Society is dedicated to promoting the science and art of good land use,with emphasis on conservation of soil,water, air,and related natural resources,including all forms of beneficial plant and animal life.To this end,SCSA seeks through our Journal of Soil and Water Conservation,and other programs,to educate people so that mankind can use and enjoy these natural resources forever.As a non-profit organization we depend upon our 13,000 members for financial support and guidance on policy issues.As a charter and fellow member of SCSA,I appreciate the invitation from you to testify on the FY'88 budget,submitted by the President,for several agencies in the U.S.Department of Agriculture responsible for soil, water,and watershed conservation .SCSA's membership includes professionals engaged in research,extension,forestry,and the technical,cost-sharing,and credit assistance provided to the landusers of the Nation.These owners and users of land conserve soil and water to benefit all.The majority of the members of our Society have almost daily contact with those who operate their farms,ranches and forests.Therefore,the service they provide cooperators depends on the resources available and decisions of your Committee and the Congress each year.

Past history tells us that your Appropriations Committee has refused to go along with recommended actions by the Office of Management and Budget that propose to eliminate or severely reduce vital soil,water and watershed programs of U.S.D.A.

The Committee has been aware of the urgent need to curtail unnecessary Federal expenditures and reduce projected deficits. However,you strongly believed that the programs proposed for elimination or reduction were of great value to the Nation and were therefore continued as in the past for FY'87.

The Administration has again proposed a budget that seems to ignore history.In FY'88 several programs would be terminated. Activities considered by many to be a foundation for successful soil conservation should be continued as in the past.F.Y. '88 funding,again proposed by OMB,is not realistic and,we hope,would again find little support from Congress.

However,as appropriations are restored to reasonable levels, your Committee should not be placed in the position of having to finance new programs at the expense of the traditional and proven conservation activities.The Conservation Reserve Program,passed by Congress and signed into law by the President on December 23,1985,as an important provision of the Food Security Act of 1985,has attracted widespread participation. The Conservation Title (XII) has several important features that should be fully implemented as required by the new law.

The combined data for the first through the fourth signup for CRP from ASCS,shows over 225,000 bids received(nearly 160,000 bids accepted)on nearly 19 million acres of highly erodible cropland.The CRP offers producers help in retiring highly erodible cropland.ASCS will share up to half the cost of establishing permanent grasses,legumes,trees,windbreaks,or wildlife plantings on eligible acres.Under 10-year contracts, ASCS will make annual rental payments to accepted bidders as long as the terms and the conditions of the contract are met.The average rent per acre per year is now at $ 48.70.

Erosion rates per acre,prior to adopting land conservation practices,were about 27 tons per year.Erosion is reduced to acceptable "tolerance level-T" on all these soils,thereby reducing annual soil loss by millions of tons and protecting the ability of that land to produce food and fiber for the long-term future.In addition there will be substantial wildlife habitat and water quality benefits,along with financial returns to the landowner and the public.The value of the CRP, and other provisions of the 1985 Farm Bill,is just beginning to be realized.It is our hope that the Congress will not be forced,as the Administration budget suggests,to make a choice between tested conservation actions and those newly underway. The Society I represent would not want this to be the case.We supported the Conservation Title (XII) of Public Law 99-198. We also support the continued level of appropriations needed for research,extension,cost-sharing and technical assistance. These programs-as measured in constant dollars-have already suffered a steady and damaging decline in the past decade.

Mr.Chairman,the Society is pleased that the Congress is even now recognizing the additional workload placed on key USDA agencies by the Food Security Act of 1985.A Supplemental Act for funding during the current fiscal year could provide the necessary resources to insure that implementation of the new conservation provisions of the "1985 Farm Bill" will be done in a timely,professional,and high quality manner.

There are already indications that the intent of the law will not-should not-be fully implemented.This would be a mistake. Thousands of landusers will make decisions related to the Conservation Reserve,Sodbuster,Swampbuster,Conservation Compliance,Conservation Easements and Farmland Protection Programs over the next several years.It is important that these new challenges and responsibilities are carried out in ways that will harmonize with long standing committments to landusers engaged in prior soil,water and watershed conservation. It is also important that the several provisions of the law be allowed the time and resources necessary to demonstrate the wisdom of linking commodity and conservation policy.

In FY'88,as proposed in the budget,it would seem to be most unreasonable to expect the termination of the several longterm SCS,ASCS and Extension Service activities that have the proven support of their field participants.These programs for conservation cost-sharing,education,inventory and monitoring, resource appraisal,watershed planning and operations,resource development,water bank,forestry improvement,and Great Plains are dedicated to assuring that soil and water will be used to produce food and fiber from a sustainable agriculture.These programs also substantially reduce the off-site impacts of unwise land use.Concern for non-point sources of pollution is a key feature of the new Water Quality Act.Additional research is needed to document the value of "low input" agriculture.

In 1982,sheet and rill erosion moved more than 3.4 billion tons of soil on nonfederal rural land,and wind ersoion moved 2 billion tons. More than 187 million acres of nonfederal lands are eroding at damaging rates.Although a permanent cover of grass or trees generally provides adequate protection against ersosion,about 18 percent of our rangeland,9 percent of our pastureland,and 6 percent of our forest land is eroding at rates that will reduce the long-term productive capacity of those lands.Cropland,as you know,is far more vulnernable to forces of erosion-about 40 percent of all cropland is eroding at rates that exceed tolerable levels. The studies of Resources for the Future estimates that sheet and rill erosion over the past 30 years resulted in on-site costs of $1 billion to $1.5 billion in 1982.These costs were based on loss of productive capacity and increased fertilizer and fuel use on corn and soybean land.The off-site damages were also significant.Additional losses occur from wind erosion, upstream flooding,and saline soils.Wildlife habitat has been stressed by "fence-row-to-fence-row" farming and needs help.

Therefore,the Soil Conservation Society of America would recommend F.Y'88 funding(Summary Table 1)for continuation of base programs,along with full implementation of the new Act. Funds appropriated by state and local governments,for several conservation programs,exceeds $ 328 million this fiscal year. They need assurance that a long standing partnership with the Federal activities is not to be jeopardized.I have attached Table 2 to show the non-federal support for conservation.The attrition of SCS capability over the past decade is depicted in Table 3.SCSA appreciated the opportunity to again testify.

Summary Table 1

U.S.Department of Agriculture Agencies related to Soil and Water Conservation Activities

(In millions)

U.S.D.A. Agency Program	FY'87 Available Funds(Est.)	FY'88 President's Proposals	FY'88 SCSA's Recommendation
SCS			
Tech.Ass't.	$297.8	$314.2	$314.2*
Soil Survey	58.2	67.7	67.7
Snow Survey	5.0	5.4	5.4
Pl.Mat.Ctr.	4.6	5.0	5.0
I.& M.	11.7	5.0 (T)	11.7
Res.Appr.	2.5	2.2 (T)	2.5
River Basins	12.1	8.3 (T)	12.1
Watershed Plg.	8.7	5.5 (T)	8.7
Watershed Op.	175.9	50.0 (T)	175.9
GPCP	20.5	2.8 (T)	20.5
R.C.& D.	25.0	10.0 (T)	25.0
Staff Yrs.	14,177	10,542	14,177 **
RAMP	(9.0)	(.5)	(9.0)
		(T)=Termination Expenses only	
ASCS			
Cons.Res.	700.0	1,388.0	1,388.0 ***
ACP	179.6	0.0 (T)	194.6
FIP	11.9	0.0 (T)	12.8
Water Bank	8.4	0.0 (T)	9.0
Colo.Salinity	3.8	0.0 (T)	4.0
ARS			
Soil & Water Cons.Res.	60.0	62.0	62.0
CSRS			
Hatch Act	148.8	155.5	155.5
McIntire-Stennis	12.4	13.0	13.0
Rangeland Res.	.5	0. (T)	.5
Extension Ser.			
Gen.Form.Pro.	229.7	237.6	237.6
Earmarked Pr.	78.7	0.0 (T)	78.8
RREA	2.4	0.0 (T)	2.4
FmHA			
Rural Fire Pr.	3.1	0.0 (T)	3.1
S.& W.Loans	14.0	0.0 (T)	14.0
Watershed Prot. & Fl.Pr.Loans	7.9	0.0 (T)	7.9
RC&D Loans	1.2	0.0 (T)	1.2

*-Total does not include full cost of servicing P.L.99-198

**-Staff years do not reflect total needs for all programs including the workload demands of implementing P.L.99-198

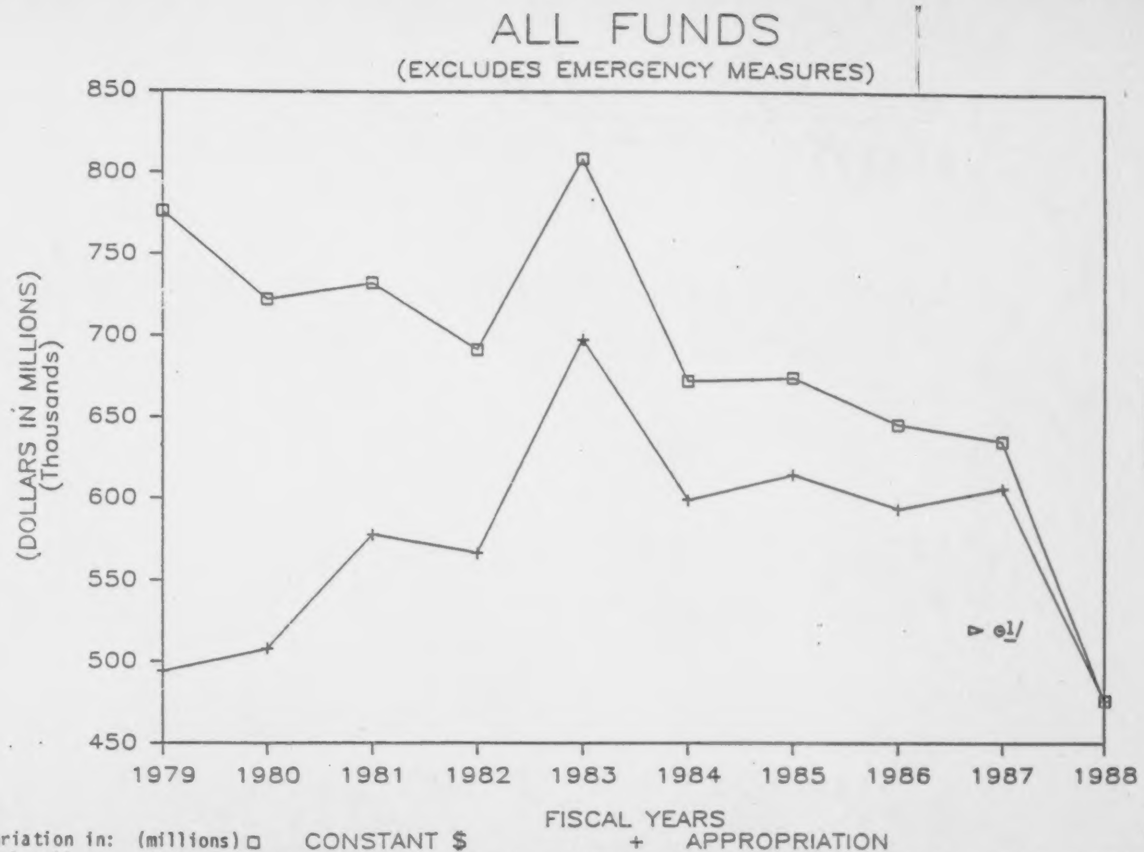
***-The appr.will need to meet all CRP contract committments.

Table 2

FUNDS APPROPRIATED BY STATE AND LOCAL GOVERNMENTS FOR CONSERVATION PROGRAMS
FISCAL YEAR 1987

	STATE GOVERNMENT	LOCAL GOVERNMENT	TOTAL
ALABAMA	$1,050,000	$ 842,000	$1,892,000
ALASKA	152,060	120,300	272,360
ARIZONA	1,431,264	2,104,347	3,535,611
ARKANSAS	2,658,300	3,212,400	5,870,700
CALIFORNIA	3,362,000	2,283,000	5,645,000
COLORADO	598,319	364,796	963,115
CONNECTICUT	761,100	398,400	1,159,500
DELAWARE	5,777,000	636,480	6,413,480
FLORIDA	1,599,300	1,472,900	3,032,200
GEORGIA	1,924,000	2,887,000	4,811,000
HAWAII	4,550,748	659,483	5,210,231
IDAHO	2,354,815	123,000	2,477,815
ILLINOIS	9,635,387	3,250,026	12,885,413
INDIANA	2,350,674	2,587,766	4,938,440
IOWA	10,509,145	1,080,325	11,589,470
KANSAS	3,797,301	770,955	4,568,256
KENTUCKY	5,084,124	1,734,000	6,818,124
LOUISIANA	2,693,500	495,000	3,188,500
MAINE	453,420	269,578	722,998
MARYLAND	13,586,915	8,964,162	22 551,077
MASSACHUSETTS	1,745,500	1,602,000	3,347,500
MICHIGAN	3,429,000	1,275,392	4,704,392
MINNESOTA	31,225,852	29,312,127	60,537,979
MISSISSIPPI	234,264	2,316,616	2,550,880
MISSOURI	11,185,000	685,000	11,870,000
MONTANA	1,063,363	1,023,792	2,087,155
NEBRASKA	4,258,003	41,032,356	45,290,359
NEVADA	19,900	89,792	109,692
NEW HAMPSHIRE	23,480	223,673	247,153
NEW JERSEY	3,002,442	2,338,098	5,340,540
NEW MEXICO	537,126	1,925,012	2,462,138
NEW YORK	3,222,736	3,756,589	6,979,325
NORTH CAROLINA	5,110,000	5,949,000	11,059,000
NORTH DAKOTA	863,521	876,000	1,739,521
OHIO	6,573,900	4,794,000	11,367,900
OKLAHOMA	2,610,235		2,610,235
OREGON	755,852	3,614,708	4,390,560
PENNSYLVANIA	701,000	208,000	909,000
PUERTO RICO	1,398,203	427,455	1,825,658
RHODE ISLAND	139,700	8,900	148,600
SOUTH CAROLINA	2,901,000	1,722,393	4,623,393
SOUTH DAKOTA	318,440	768,477	1,086,917
TENNESSEE	1,347,266	922,880	2,270,146
TEXAS	3,454,805	4,328,361	7,783,166
UTAH	1,614,710	204,191	1,818,901
VERMONT	395,300	3,570	398,870
VIRGINIA	3,478,340	1,688,600	5,166,940
WASHINGTON	2,009,526	1,352,965	3,362,491
WEST VIRGINIA	1,122,225	927,825	2,050,050
WISCONSIN	6,258,300	4,990,372	11,248,672
WYOMING	241,600	250,750	492,350
TOTAL	$175,549,961	$152,874,812	$328,424,773

Table 3



Appropriation in: (millions)										
Actual dollars	$494.5	$508.2	$578.2	$567.0	$698.3	$599.9	$615.4	$594.6	$607.7	$476.3
Constant dollars	$776.5	$722.7	$732.6	$692.0	$809.1	$673.2	$675.1	$646.4	$636.1	$476.3

1/ 1987 estimate would be $521.7 million if the President's rescission proposals for GPCP (8.0 million), WFPO ($73.0 million) and RC&D (5.0 million) are approved.

NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS

STATEMENT OF CLARENCE DURBAN, PRESIDENT

Senator BURDICK. The next witness is Clarence Durban, president of the National Association of Conservation Districts.

Welcome to the committee.

Mr. DURBAN. Thank you, Mr. Chairman.

My name is Clarence Durban, president of the National Association of Conservation Districts, and we have submitted to you a detailed report in our testimony, which we would like to have entered into the record.

There are over 2,900 Soil and Water Conservation Districts in this country that have the responsibility for implementing the soil conservation programs and the natural resource programs in those districts. We cooperate with not only the federal, but also state and local governments in the implementation of those programs. As a result, we have major concerns with the administration's budget.

We have seen the local support increasing year by year, while the support from the federal sources have slowed down. We believe that the President's proposed budget for next year is proposing cuts of the SCS budget of 35 percent, an agency that we are supposed to work closely with. Doing so would terminate the small watershed program, the Great Plains Conservation Program, the RC&D program among others.

In addition, he has suggested that we meet the new workload that is created by those conservation provisions of the Food Security Act by terminating all federal support for the base conservation programs, and directing that the remaining funds be used only on implementing new conservation programs.

We believe, at best, that this proposal is ill-conceived. In an effort to cut costs and reduce the deficit, the administration, we believe, is abandoning its responsibility to help protect our land and water resources. Even if the service devoted 100 percent of their work force to the Food Security Act, they cannot at this time meet the workload demands.

We are concerned that we should do everything that we can to implement the new farm bill programs, but we also vigorously support the programs that we have been accustomed to operate. We vigorously support conservation compliance, sodbuster, swampbuster, and the conservation reserve programs. We are concerned with the way that the President wants to implement these new programs.

It has been suggested that one of the proposals is to terminate SCS technical assistance for all district activities, except highly erodible property. While that is important, to control erosion, districts and SCS do much more.

We are actively involved in woodland resource improvement, range and pastureland erosion control, water quality improvements, water conservation, flood control, urban settlement and storm water control, habitat resource improvements, among many others.

It just makes no sense to us to abandon all work in these areas in order to implement a new program. We believe that the chart that you have, that was in my prepared statement, refers to some of the programs that will be lost if we continue with that kind of a philosophy and if the administration's proposal does prevail.

We recommend that the Soil Conservation Service, for fiscal year 1988, be funded at the level of $746 million. This is the amount districts feel is needed to effectively address our resource conservation problems. That figure was not arrived at lightly.

We arrived at those figures by a survey at the grassroots level of our conservation district program, district supervisors relating to us their feeling of what they needed to have in order to accomplish the job that needs to be done out there on the land.

We are not asking that the federal government pay all the costs. We are also requesting at this time that state and local governments pick up more, and they have been doing so.

I want to thank you for your recent action to help us with the supplemental appropriation that we asked of $20 million at this point in time. We believe this is a tremendously good beginning.

There are those who think that we have failed with our past programs, with the base programs. I simply ask that they spend the time on the land that we have. We don't like to be forced to make the decision of the condemned man, whether he be gassed or electrocuted, the end result is the same.

This committee has a chance to set a national policy for conservation if the proper financing is approved, and I sincerely urge you to do so. I want to thank you for this opportunity to appear before this committee.

Thank you.

Senator BURDICK. Thank you for your contribution this afternoon.

The Department of Agriculture is reluctant to hire significant numbers of staff to carry out the conservation provisions of the farm bill because it is temporary work. Once the conservation plans are in place by 1990, the staff won't have work to do, so it is a bad personnel policy to hire a lot of people now who will have to be laid off later. Do you agree with that assessment?

Mr. DURBAN. That is probably an accurate assessment. We would propose that at the local level, we can fill in some of the gaps with the proper funding, to get the required personnel that could be used in this period of time when we need so much assistance for the farmer to make some plans, and to participate, and to have on his land the conservation plan that needs to be there.

We believe that districts across this country, with the state commissions, and assistance, can assist in that workload with the proper funding.

Senator BURDICK. Recently, a USDA representative told the committee that the farmers have been getting all their conservation work done for free. How do you react to that remark?

Mr. DURBAN. I am deeply hurt, as a farmer myself, sir, to have that kind of a statement made that suggests that all farmers in this nation have no conservation effort, and only do that work when they have free help.

On my own farm, I have participated for a number of years in conservation issues, and my father before me, back in the thirties, in the Depression time, when he did not receive governmental assistance. I was instructed as a small boy that I didn't plow that waterway ditch, and at that time I didn't know what it was for. In recent years, there are many farmers in this country who have not relied on complete federal assistance to operate, and they have a conservation effort.

After 25 years as a district supervisor, and certainly as the National Association of Conservation District's president, I deeply resent those kinds of statements directed at all agriculture which, as the good Senator from my own state just indicated, has a tremendous record of production, which obviously is some of our problems. Most certainly, without that tremendous ability to produce, the consumers of this nation certainly would see a different price record.

I am deeply hurt and concerned by those statements.

Senator BURDICK. That is only half the story.

I will turn it over now to Senator Grassley.

Senator GRASSLEY. I have no questions. I simply want to say that we appreciate your conservation efforts, and I hope that we are as successful this year as we have been in the past.

Mr. DURBAN. Thank you, Senator, I appreciate those remarks. We will continue to assist you and this committee in any way that we can.

Senator BURDICK. Thank you very much. We appreciate your contribution.

[The statement follows:]

STATEMENT OF CLARENCE DURBAN

Mr. Chairman, distinguished members of the subcommittee, my name is Clarence Durban and I appear before you today as the President of the National Association of Conservation Districts (NACD). NACD represents the concerns of America's almost 3,000 conservation districts and the more than 15,000 men and women who serve as volunteer leaders in resource conservation programs.

Mr. Chairman, members of the subcommittee, I want to thank you for this opportunity to share with you NACD's views on the fiscal year 1988 budget for USDA's soil conservation programs. Our association's funding resolution, attached to this testimony, covers many important resource programs in many sectors of the federal government. Today, however, I will confine my remarks to the Soil Conservation Service (SCS) and the Agricultural Stabilization and Conservation Service (ASCS) of the Department of Agriculture.

The technical assistance provided by SCS and the financial incentives provided by ASCS cost-share programs are the core of federal soil conservation efforts. We have a 50 year history of cooperation with conservation districts and state government. More importantly, I believe the record shows we have a 50 year history of real progress in controlling soil erosion from our farm and ranch lands and addressing other resource concerns. If we examine the cropland acreage which has a potential to erode at a rate of 8T per acre per year (EI greater than 8), we see that 30% of that land is eroding at "T" or less. Forty-six percent of that highly erodible land is eroding at less than 2T.

Those statistics provide me with the basis for my belief that the district/SCS partnership has had a positive effect on controlling erosion on cropland. There are naysayers around who believe that our federal soil conservation programs have failed because problems still exist after fifty years of effort. I contend that our programs have not failed. In fact, they have been remarkably successful. The natural resource problems of this country are enormous. Many of those problems are very evident as you look down from an airplane when flying over this great land. When you consider the relatively limited amount of resources available to us and contrast that with the soil and water resources we need to protect, we can say without question that we have been successful.

That past success is what brings me before this distinguished subcommittee today. In 1985, the Farm Bill gave us the sodbuster, conservation compliance, conservation reserve and swampbuster programs. These additional programs to control soil erosion were fought for by conservation districts because we saw these additional programs as a necessary component to our nation's resource conservation efforts.

The key words are "additional programs." It appears clear to us that Title XII of the 1985 Farm Bill does not represent a repudiation by Congress of our base conservation program. Instead, the new conservation provisions of the Farm Bill add to our base. This is a critical distinction we feel this subcommittee should make.

This year, as it has every year, the Reagan Administration is proposing that we abandon the base programs that protect our soil and water resources. Once again the Administration asks that Congress dismantle the Small Watersheds program, the Great Plains Conservation program, and the RC&D program, but that's not the whole story. They also propose that we abandon our efforts to improve the rangelands and woodlands of our country. They ask us to ignore the need to address the problems of animal waste management and nutrient loading of our waters. They ask us to ignore the need to control erosion from urban development, to manage stormwater runoff, and the ravages of flooding.

I must admit that USDA's arguments are seductive on the surface. They tell us that less money can provide our resources with the same level of protection. In times when money is tight, that is a message which easily finds supporters. However, we also have to look at the story not being told.

Attached to my comments today are 52 tables, one for each state and a national summary. These charts tell the whole story and contains information which this subcommittee will find helpful as it sets FY-88 spending levels for SCS and ASCS.

Under the Administration's plan, support for all base conservation programs would be terminated. The remaining funds would be used almost exclusively on FSA programs in those states with the greatest affected acres. This approach could involve the transfer of up to 1,200 SCS technical employees at the field level.

Of perhaps more significance, the proposal would terminate many SCS technical assistance programs. I urge you to look carefully at direct assistance provided to landowners. District and SCS employees do much more than just fight erosion problems on highly erodible croplands. They also address woodland resource improvement, range and pastureland erosion control, water quality improvement and conservation, flood control, urban sediment and stormwater control, and wildlife habitat resource improvement. Under the Administration's plan, all SCS support for these important programs would be terminated.

As you can see, SCS spends a great deal of time helping state and local governments. For example, they assist local planning boards, conservation districts, county government, and state conservation agencies. By working together, we can develop broad based resource conservation plans which addresses concerns of all the jurisdictions. The cooperation we find in place works as a multiplier of our efforts. Today, we find local, state, and federal governments working closer together to provide even more resource conservation services to the public.

Can we rationally afford to follow this policy and abandon the bulk of our base conservation programs? Conservation districts have spoken clearly on this question and the answer is no. We cannot afford to abandon a broad based resource conservation program in favor of a single issue program. While NACD and districts clearly support the conservation provisions of the Farm Bill, we can not allow valued base conservation programs to be washed down the drain.

Mr. Chairman, members of the subcommittee, we did not arrive at the recommendations for FY 88 funding levels easily. Our members, similar to yourselves, are public officials who are answerable to the taxpayers for any spending decisions they make. They understand that it is difficult to request an increase at this time of large federal deficits. However, their overriding concern is to protect our soil and water resources.

As an association, we will continue our effort to see that SCS is funded in FY 88 at the level of $746.3 million. We believe our recommendation is an accurate reflection of what is actually needed to address our nation's resource conservation problems. Specifically, NACD is recommending a conservation operations budget of $476.6 million in FY 88. This level of funding will allow districts and SCS to continue to address state and local resource problems and to meet the conservation mandates of the 1985 Farm Bill.

Simply restoring funds that the Administration has proposed cutting from the SCS budget is not enough. The present appropriation is needed just to keep the current base programs operating. We need new resources to meet the conservation needs of the food Security act.

In addition, I would draw your attention to some of our other recommendations. NACD believes that it is imperative to continue the ASCS cost-share programs. USDA estimates that somewhere between 45 and 80 million acres of cropland will need some type of conservation practice to meet the requirements of conservation compliance. If we are going to require adoption of soil conserving practices, we need to maintain the programs that can help landowners defray some of the costs of applying conservation practices.

Districts and the national conservation program have had to do without for too long. We have a responsibility not only to promote a fiscally sound policy, but also an environmentally sound policy. This is your chance to do just that. Resource degradation costs this country billions of dollars every year. This increase in funding will be returned to the public through improved water quality and a sustained resource base.

There are those who say that now is the time to make a decision about which is most important: base conservation programs or the new conservation programs. I would suggest that these individuals have not spent enough time on the land. Soil conservation is not just a topic for discussion in the "ivory towers." It is a part of the day-to-day operations of millions of farm and ranch families. I know all the members of this subcommittee understand, as I do, the daily struggles faced by people who live on the land. Because of that practical day-to-day experience, they have a good understanding of what conservation practices are practical and economically sound. Having that kind of experience at the district level is an invaluable asset.

As dedicated resource conservationists, district officials cannot purposefully choose to allow any of our resources to degrade. To ask us to do so puts us in the same position as the condemned man who is asked if he prefers the firing squad or the electric chair. While he may get a choice, the end result is the same. To choose between the base conservation programs and the conservation provisions of the Farm Bill is a similar choice. Whatever the choice, the resources and the people will lose.

NACD is convinced that our soil conservation programs are in that very position. We urge this subcommittee to appropriate enough money to:

1. maintain technical assistance to cropland and noncropland resource concerns;

2. continue the vital work accomplished through Small Watersheds, Great Plains, RC&D and ASCS cost-share programs; and

3. provide the technical services needed to implement the conservation provisions of the 1985 Farm Bill.

In addition, we think it is time for Congress to make clear to USDA that yearly assaults on the programs will not be tolerated. We have seen untold wasted manhours created by this Administration's budget proposal. It is fine to suggest to Congress that a change in policy is necessary. That is part of the role of the Administration. However, there comes a time when we need to move forward. If there has been a problem in the last several years in how soil conservation programs have operated, it is because of the Administration's own actions. Every year, the agencies are forced to develop plans to shut down programs and redirect people. Every year Congress has said no, yet the time spent planning for the failed proposals is wasted effort that could be used protecting our resources. NACD asks that one more time Congress direct USDA get on with the business of soil conservation, and this waste of federal resources.

This subcommittee has the opportunity to give real direction to our soil conservation programs. I urge you to take this opportunity to protect our resources and move ahead against these problems.

Thank you for this opportunity to appear before this subcommittee.

1987 FUNDING RESOLUTION
RECOMMENDED ACTIONS

1. NACD urges the United States Congress to appropriate for Fiscal Year 1988 the sums listed under the column titled "NACD Recommendations" in the following chart.

2. NACD urges the United States Congress to amend the Conservation Reserve Program language of the 1985 Farm Bill to provide for the use of Commodity Credit Corporation borrowing authority to pay CRP contract obligations through the life

of the program. While we realize that the monies must still be appropriated to the CCC to make the annual rental payments, NACD feels strongly that use of CCC authority enhances the attractiveness of CRP in the minds of the farmers.

3. If the U.S. Congress fails to appropriate adequate financial resources needed to implement the conservation provisions of the 1985 Farm Bill without causing major disruptions in current base soil conservation programs, NACD has no option but to recommend that the base soil and water conservation programs be maintained and only money above this level be used for Title XII of PL 99-198. (conservation provisions of the 1985 Farm Bill)

4. NACD fully supports reinstatement of water resource project funding for watershed planning, river basin surveys, watershed operations, and RC&D's and encourages the acceleration of these programs to supplement other conservation programs in addressing the conservation provisions of the 1985 Farm Bill.

NOTE: During the 1987 convention, the NACD Council reaffirmed the Association's support of direct grants being provided to state soil conservation agencies and conservation districts from federal appropriations to carry out conservation planning and to provide technical assistance in addition to the services provided by SCS personnel.

The National Association of Conservation Districts
1987 FUNDING RESOLUTION
adopted by

The NACD Council
at the

41st Annual Convention
Bally's Grand Hotel
Reno, Nevada
February 1-5, 1987

PROGRAM	FY 87 APPROPRIATION	PRESIDENT'S FY 88 BUDGET PROPOSAL (in million $'s)	NACD RECOMMENDATION
SOIL CONSERVATION SERVICE			
1. Conservation Operations	367.0	399.6	476.6
2. Grants to States & Districts	0	0	0
3. Special Areas Cons. Prog.	0	0	0
4. River Basin Surveys	11.8	8.3(t)	15.2
5. Watershed Planning	8.5	5.5(t)	9.2
6. Watershed Operations	161.1	49.0(t)	191.3
7. Emergency Flood Repair	14.8	1.0(t)	5.0
8. Great Plains Cons. Prog.	20.5	2.8(t)	22.0
9. RC&D	25.0	10.0(t)	27.0
10. Total SCS Appropriations	608.7	476.3	746.3
11. RAMP	(9.0)	(.5)	(9.0)
ASCS			
12. ACP	179.6	0(t)	194.6
13. FIP	11.9	0(t)	12.8
14. Water Bank	8.4	0(t)	9.0
15. Special Areas Cons.	0	0(t)	0
16. Colorado River Salinity Prog.	3.8	0(t)	4.0
17. Emergency Conservation Prog.	0	0	0
18. Total ASCS	203.7	0(t)	220.4
AGRICULTURAL RESEARCH SERVICE			
19. Soil & Water Cons. Res.	60.0	62.0	62.0
APHIS			
20. Animal Damage Control	21.6	12.1	21.6

PROGRAM	FY 87 APPROPRIATION	PRESIDENT'S FY 88 BUDGET PROPOSAL (in million $'s)	NACD RECOMMENDATION
COOPERATIVE STATE RESEARCH SERVICE			
21. Hatch Act	148.8	155.5	155.5
22. McIntire-Stennis	12.4	13.0	13.0
23. Rangeland Research	.5	0	.5
EXTENSION SERVICE			
24. General Formula Programs	229.7	237.6	229.7
25. Earmarked Programs	78.7	0(t)	78.7
26. Renewable Resources Ext.	2.4	0(t)	2.4
FOREST SERVICE			
27. Forest Pest Management	31.0	27.6	31.0
28. Rural Fire Protection	13.6	3.4	13.6
29. Forest Mngmt. & Protection	9.9	0(t)	9.9
30. Range Management	26.8	27.8	27.8
31. Range Betterment Fund	3.6	3.6	3.6
FARMERS HOME ADMINISTRATION			
32. Rural Community Fire Prot.	3.1	0(t)	3.1
33. Soil & Water Loans	14.0	0(t)	14.0
34. Watershed Prot. & Flood Prev.	7.9	0(t)	7.9
35. RC&D Loans	1.2	0(t)	1.2
ENVIRONMENTAL PROTECTION AGENCY			
36. Water Quality Mgmt. (205 (J))	24.2	20.0	24.2
37. Clean Lakes Program	4.5	0(t)	4.5
38. State Program Grants	62.1	62.1	62.1
39. Nonpoint Source Imple.	0	0	70.0
BUREAU OF LAND MANAGEMENT			
40. Soil, Water, & Air Management	15.1	15.4	15.4
41. Grazing Management	31.4	48.1	31.4
42. Wildlife Habitat Management	16.1	14.7	16.1
43. Wild Horse & Burro Program	17.8	(see note)	17.8
U.S. GEOLOGICAL SURVEY			
44. Topographic Surveys & Mapping	86.5	87.4	87.4
45. Water Resources Investigation	136.9	137.2	137.2
U.S. FISH & WILDLIFE SERVICE			
47. Fishery Research & Devel.	11.6	11.4	11.6
48. Fish Hatcheries	23.9	24.7	24.7
49. Refuge Fund	5.6	5.6	5.6
50. Anadromous Fish Program	2.0	0(t)	2.0
51. Cooperative Research Units	4.6	4.9	4.9

(t) = program scheduled to be terminated in fiscal year 1988.

IOWA STATE UNIVERSITY

STATEMENT OF DR. MICHAEL CROW, DIRECTOR, SCIENCE POLICY AND RESEARCH

Senator BURDICK. Our next witness will be Dr. Michael Crow, director, science policy and research at Iowa State University.

Dr. CROW. Thank you, Mr. Chairman, Senator Grassley.

The purpose of talking today, and I have submitted some formal testimony for the record, if that is all right, is to bring the committee up to date on a planning process that was initiated at the instruction of the committee last year to begin planning for the Center for Industrial Agricultural Products Development jointly between Iowa State University, the Department of Agriculture, and the industry.

Since the committee's action last year, we have been proceeding along this path. We have essentially completed the planning process, and I thought I would bring you up to date on what we are doing.

First, the purpose of this Center for Industrial Agricultural Products Development is much along the same type of lines as the program that Senator Glenn spoke about a few minutes ago, but a little bit further down the research path.

The purpose of this center is to provide a means to take basic research produced in American colleges of agriculture, and Agricultural Research Centers, and try to develop that knowledge into usable products that can be consumed by existing industries, to turn new processes and new products, both industrial feedstocks and agricultural feedstocks, and also a means to stimulate new business activities, particularly in the upper Midwest.

It is our conclusion, and it is the conclusion of the group that was put together, made up of USDA personnel, Iowa State University personnel, and representatives from industry, that this country lacks the means to capitalize on our basic research. We lack the type of research organization, which is capable of producing the type of knowledge which can be consumed by industry and turned into new business type activities.

We lack what the Japanese and others have developed, and that is, we lack the means to conduct small scale product development research, the type of research that is not going on in ARS, and at the Agricultural Research Centers in Philadelphia, New Orleans, Albany, California, or Peoria, IL, and we lack the means to do research which can be utilized and developed in the short term.

I have an example of this coming out of our own university. Senator Grassley, perhaps, has heard this story before.

A few years ago, at the University, we had a biochemist by the name of Dexter French, and he was conducting a research program to develop a new type of protein molecule. It turned out that he developed a protein molecule with a cavity in the center. Without going into further details, it turns out that you could use this cavity to put in other types of molecules like flavors, other types of food substances, other types of protein, alcohol molecules inside that protein.

We did the basic research with USDA funding and developed this. There were students from Japan, trained at Iowa State to understand this type of research. Subsequently, because in the United States, and at Iowa State and other universities, to develop this, that research was taken to Japan and developed into a broad line of agricultural products, all of which are now stimulating economic activity around the world.

How we learned about this, we had a team from Iowa State that went over to Japan in October, and they saw a picture of this Iowa State professor up on the wall in this Japanese science laboratory. We also noticed that all of the products had been named by this particular professor in honor of the basic science that he had produced.

We have lacked the ability to take advantage of the basic knowledge that we have been producing for some time. It is the intent of our plan to put together a center which can take the best of the basic knowledge produced on new agricultural products, and develop small processes which stimulate economic activity.

To do this, the Iowa State University/USDA solution is to develop a center to test the processes, to produce new product discoveries, developed in the existing USDA centers and in various university labs. The center would be built around a series of small pilot plants, designed to take new scientific discoveries, show the process and product potential.

From this activity, industry feels, and we have been in contact with these people, and they were in our mandated review team, that they can then, and only then, take advantage of the large amount of basic research that is on-going, and perhaps increase the amount of basic research which others are suggesting, such as Senator Glenn.

We already know, for instance, that we can start new small businesses from genetically altered soybeans that produce a naturally occurring marker in soybeans. We can develop new chemicals from grains. We already have the basic knowledge to be able to do that, what we lack is the means to develop the processes that a new business or a new industry could also use and take advantage of.

The people in industry tell us that anything that takes longer than 5 years to develop, which is certainly the case for all basic knowledge discovered in the existing research organization, they can't capitalize on. What we are looking to do is to take those best ideas, and shorten the amount of time that it would take either a new business or an existing industry to take advantage of the knowledge, and we are looking to do this through this center.

The center is planned as a national activity, taking the knowledge from around the country, working with people from all over the country, bringing in people from industry, universities and the government. We are asking specifically of the subcommittee this year an $8.5 million appropriation to begin this activity.

In addition to that, we have committed all of our existing resources at the university, which total substantially more than that, to this activity, including our meter radiation technology center, our meat laboratory, our food processing center, and much of our recent state initiatives in biotechnology over the next 5 years, in this planned center.

We are confident that we can develop and implement this center at a 50/50 cost sharing with the federal government resources. We are looking for the support of the subcommittee for this venture. We feel that we have the support of the Department of Agriculture and industry. The Department of Agriculture, of course, will speak on their own.

Thank you very much, and I will be happy to answer any of your questions.

Senator BURDICK. Senator Grassley.

Senator GRASSLEY. Mr. Chairman, I don't have any questions, but I know, as a member of this committee, we are going to have an opportunity to debate this, but I hope that we will give fair consideration to this proposal. I very much support it. I think that Iowa State University and Dr. Crow have done a very good job of documenting the purpose and the value of this center.

I have some very positive comments that I received about the center, and they come from a person, Keith Huston, who is director of the North Central State Agricultural Experimental Station. He visited my office and informed me to report his findings and his review of the center. I believe that he is a member of a larger group that is officially analyzing this proposal.

He classified himself as a person who is always quite skeptical of major proposals such as these. But he said that he came away from his review very impressed with the proposal for the Center for Food and Industrial Agricultural Product Development.

He believes that this center will serve a very important role in improving our agricultural economy. He wanted me to know his opinion in view of the fact that, as he described himself, he is a more or less detached and unbiased, and usually skeptical observer.

I am pleased with the center myself. It makes me proud of the background work that has been done to present this proposal to the Congress. I share his enthusiasm for the proposal. I believe that I have had my questions answered on this project privately, but I want the record to include these very positive comments that I just stated from Keith Huston.

Thank you, Mr. Chairman.

Senator BURDICK. Senator Harkin advised me that he would have liked to have been here for your testimony. I know that he supports your proposal and would have told you so. But because of a conflict, he couldn't attend right now.

Dr. CROW. Thank you, Mr. Chairman.

Senator BURDICK. Thank you for your contribution.

[The statement follows:]

STATEMENT OF DR. MICHAEL M. CROW

SUMMARY OF REQUEST

The concept for the establishment of a Center for Food and Industrial Agricultural Product Development was initiated in 1985 as a part of Iowa State University's initiative to enhance agricultural diversification and enhanced utilization research in the U.S. A preliminary plan for the Center was presented to the Congress in April 1986, and in October 1986 Congress asked the U.S.D.A. to work in cooperation with I.S.U. to develop a comprehensive plan for the Center. This testimony is intended to inform the Committee on the progress and findings of that planning and review process and to make an FY 1988 budget request.

SUMMARY OF PLANNING AND REVIEW PROCESS

A program plan for the development of the Center was developed by Iowa State University researchers with input from U.S.D.A. and industry representatives. The plan calls for the establishment of an R&D enterprise that can fill the gap between the basic research being carried out by university and government labs (ARS/agricultural product labs) and the needs of industry. Industry needs, whether the company is large and established or new and fledgling, knowledge about the development potential of new discoveries. At present such knowledge is not easily produced in the U.S.

The principal goal of the Center for Food and Industrial Agricultural Product Development is to conduct intermediate range applied research. This research is designed to fill the gap between basic research and commercial development, a gap which is not being filled in the U.S. at the present time.

SPECIFIC FY 1988 ACTION REQUESTED

It is requested that the Congress appropriate $8.5 million in FY 1988 for the development and initiation of the Center for Food and Industrial Agricultural Product Development.

CENTER OBJECTIVES

Iowa State University proposes the establishment, in cooperation with the United States Department of Agriculture, of an interdisciplinary research center that will:

1. Cooperatively develop food and industrial products from traditional agricultural products, alternative crops, and agricultural products modified through biotechnology.

2. Explore and improve methods for processing traditional agricultural products, alternative crops, and agricultural products modified through biotechnology to make the U.S. more competitive in international markets.

3. Apply the biotechnology necessary to control the physical, functional, and flavor properties of agricultural products to enhance their utilization.

4. Develop a marketing information system to identify new product marketing opportunities and evaluate economic feasibilities of new utilization technologies.

5. Develop the capability to efficiently transfer to industry the technologies developed at the I.S.U. center and corresponding U.S.D.A. research programs.

6. Educate students, industry personnel and potential customers of our agricultural products in technological and organizational skills that will enhance utilization of agricultural products.

To implement these objectives, the center will integrate the Meat Export Research Center (MERC), the Food Crops Processing Research Center (FCPRC) and Food Irradiation Center (FIC) at I.S.U. into a single program. An expanded program will be carried out using both existing and new facilities.

RESEARCH PROGRAM

The research program of the center will be focused in two major research thrusts: 1) product/process development and 2) market evaluation and development. These thrust areas will attempt to accelerate the rate of incorporation of new technologies into commercial practice and guide the research of the center to keep it focused on problems pertinent to industry.

PRODUCT AND PROCESS DEVELOPMENT

Goal

Develop and evaluate technologies that enhance the use of agricultural products.

Research Thrusts

1. Develop new product/processing technologies for new and traditional agricultural materials to increase acceptance and improve utility, shelf-life, and processing efficiency.

2. Characterize new plant, animal and microbial materials evolving from biotechnology and alternative crop programs, and evaluate their appropriateness in new food and industrial products.

3. Develop the information necessary to understand and control the physical, functional and sensory properties of agricultural products, and modify those properties to enhance utilization.

MARKET RESEARCH AND SYSTEMS DEVELOPMENT

Goal

To evaluate market potentials of new products, identify market opportunities for new products and develop systems for integrating the production, processing, and marketing of new products.

Research Thrusts

1. Identify product needs and opportunities in domestic and international markets to expand the utilization of traditional agricultural products.

2. Evaluate the profitabilities of potential new products for American agriculture.

3. Identify and evaluate barriers to the movement of value-added agricultural products in foreign trade.

TECHNOLOGY TRANSFER AND SERVICE PROGRAM

The technology transfer and service program will facilitate the transfer to industry of new product/processing technologies, market intelligence and marketing systems developed in the U.S.D.A. laboratories and the center. Strong ties between industry and the research programs of the center will be forged to enhance communication. The center will arrange services and support that industry may need in adopting new technologies and in using market information.

Goal

To maximize the potential for success in commercializing new agricultural products and processes developed by U.S.D.A. and the center through more efficient transfer of technology to industry.

Objectives

1. Establish ties between industry and the center to provide for reciprocal communication that will inform industry of technological and marketing opportunities and the center of industry's needs and perspective.

2. Develop an educational program for industry to disseminate knowledge gained from utilization research.

3. Develop an educational program for research and management personnel to make them more aware of industry needs and market opportunities.

4. Work closely with individual enterprises in adopting and commercializing new products and processes.

BARNES-AASTAD SOIL AND WATER CONSERVATION RESEARCH ASSOCIATION

STATEMENT OF WILLARD MICKLISH, DIRECTOR, BARNES-AASTAD SOIL AND WATER CONSERVATION RESEARCH ASSOCIATION, AND EASTERN SOUTH DAKOTA SOIL AND WATER RESEARCH FARM, INC.

ACCOMPANIED BY JOHN F. STOCK, M.D.

Senator BURDICK. Our next witness will be Mr. Richard Fossum, chairman of the board of the Eastern South Dakota Soil and Water Research Farm, Inc. He is accompanied by Mr. Dale Braaten, who is also a member of the board.

Mr. MICKLISH. With your permission, Senator Burdick, I wish to represent both the Eastern South Dakota Soil and Water Research Farm, and the Barnes-Aastad Soil and Water Conservation Research Association. So we will cancel one of our appearances.

First of all, Senator Burdick, I would like to say that I extended your greetings to Mrs. Clayton Gates last year, and she was very, very pleased to hear from you. Mr. Gates passed away a couple of years ago. So I extended your greetings to his widow, and she was very pleased to hear them.

Senator BURDICK. He was a great friend of mine.

Mr. MICKLISH. I would like to submit my testimony on the Barnes-Aastad Soil and Water Conservation Research Association.

My name is Willard Micklish from Morris, MN, and I have been involved with Barnes-Aastad Research Association for 20 years.

Senator, we know that agriculture today is suffering through significant financial difficulties. Past experience with expensive and complicated programs has shown that the solution is not larger and more costly federal government programs. The combination of high interest costs and low production prices has delivered a severe blow, and will likely remain.

We, as farmers, need adjustment strategies that can be used to regain profitability through reduced unit protection cost and risk to sustain long-term productivity. Further research is needed on how to integrate production technology into whole farm management systems to maximize economic returns and also conserve soil and water resources.

Research on conservation tillage has been useful in decreasing erosion. However, there is limited information on the run off and the nutrient delivery of these tillage systems and their ultimate effect on the environment. As the intensity of cultural practices for crop production increase, there are increasing risks of undesirable environmental effects.

Their potential contribution to ground water supplies is likely to change as new cultural practices are developed. Research is needed to understand the intricate working of these systems and how the farmer can interact to make intelligent management decisions that will minimize the contamination of the ground water supplies from soluble fertilizers and pesticides.

The soils of the north central states are some of the most fertile and productive in the world, but they must be properly managed and protected to sustain long-term productivity. Erosion leads to significant losses of organic matter and environmental degradation and can threaten the long-term productivity of the cropland in this area.

One area of erosion research with limited information is the effect of the freeze-thaw cycles in our northern climates on the soil properties and the subsequent effect on erosion and off-site damages. This research is appropriate in Minnesota where severe soil loss can occur during brief periods from a combination of snowmelt and rainfall during intense spring storms.

Research is needed to provide landowners with the tools to develop soil and water conservation resource management systems to protect and stabilize the crop production within the climate constraints of the area.

Tillage systems such as no till and minimum till can reduce soil erosion and sustain or even enhance productivity. However, there is a serious lack of knowledge about the long-term success of these practices with regard to soil types, plant varieties, fertilizer needs, cropping sequences, and pest management.

Water quality is a critical concern in many parts of Minnesota and will become even more critical as the demand for water increases. The unique combination of research scientists at the Morris Lab provide for an interdisciplinary team to attack problems in protection and efficient use of our water resources.

Research is needed on how to utilize agronomic plants to reduce pollution of ground water and surface waters. A comprehensive system of plant management in the development of new tillage systems. Proper variety selection and optimizing the plant spacing and population can be used to achieve earlier canopy closure.

Earlier crop canopy development during the spring can protect the soil from raindrop impact and minimize soil losses and result in lower herbicide costs because properly spaced plants will be more competitive with the weeds.

Earlier canopy cover also can reduce soil evaporation losses and result in more water available for transpiration and increased crop water use efficiency. Research is needed on identifying the crop varieties or alternate crops with high leaf area expansion rates that perform well in conservation tillage systems. Information is needed on the environmental, physiological and morphological factors limiting early leaf area development in the northern climates.

The research program at the Morris Laboratory continues to focus on providing knowledge and recommendations for the development of cost effective production systems for the northern Corn Belt. The broad mission of the laboratory is concerned about the profitability in agriculture through the development of improved soil and water management practices that will improve water quality. We fully support these research areas and solicit additional resources for the laboratory and for additional scientific positions.

A current need is a system analysis person to assist in the integration of the various components of production systems into user oriented models. This effort would allow for more effective utilization of the research information obtained by the individual scientists and would provide a more effective extrapolation of the physical processes involved to other climates and soils.

The products of this research will be the basic information that will lead to solutions of agricultural problems in the north central region. Specifically, recommendations to reduce risk of production failures while protecting soil and water resources will be provided for major soils in the region. The technology transfer to farmers and action agencies to assist in selecting profitable conservation production systems.

The low production prices have delivered a severe blow and will likely remain. We see a solution to the farm programs as a reduction of the production costs as the only consistent solution.

Thank you, Mr. Chairman, for this opportunity to testify.

Senator BURDICK. Thank you very much, Mr. Micklish, for your testimony. I have one question for you. I know that there has been a big push for no till or minimum till. Has it taken off, or is there quite a bit of reluctance?

Mr. MICKLISH. That is a very good question. In the Sunday issue of the Minneapolis Tribune, and I could leave this with your staff, there is a large article that says, "This gentleman got top yield with unlikely method." He had no till, and he got the highest yield in corn and the highest yield in soybeans in Minnesota last year.

Senator BURDICK. That is interesting.

Mr. MICKLISH. It is. It is increasing, and it is part of the cost reduction that is going to be a must.

Senator BURDICK. Thank you. We will now stand in recess while I go to the Senate floor vote.

[A brief recess was taken.]

[The statement of Mr. Micklish and the article follow:]

STATEMENT OF WILLARD R. MICKLISH

As active board members of our association of concerned farmers and agri-busniessmen, we speak to the problems of agriculture in the northern Corn Belt. Our interest in conserving the nation's soil and water resources prompts us to support USDA-ARS research in soil and water conservation and in particular of the ARS research conducted at the North Central Soil and Water Conservation Laboratory, Morris, Minnesota. The research program is directed at national and regional concerns that assist farmers in improving soil and water conservation and increasing the efficiency of agricultural production. We strongly support the research mission to develop efficient conservation production systems for northern climates while maintaining and improving the quality of our soil and water resources. The research involves cooperative efforts with the agricultural experiment stations of the University of Minnesota, South Dakota State University, and the USDA Northern Grain Insects Research Laboratory at Brookings, South Dakota.

The plight of the farmer has received national attention from the news media as a result of increasing farm foreclosures and bank closures that are a result of a declining net farm income and increased financial stress. Increasing farm debts, declining product prices, rising production costs, and depressed real estate values have forced many farmers to struggle for economic survival. We, as farmers, need adjustment strategies that can be used to regain profitability through reduced unit production cost and risk to sustain long-term productivity. Further research is needed on how to integrate production technology into whole farm management systems to maximize economic returns and also conserve soil and water resources.

Research on conservation tillage has been useful in decreasing erosion.. However, there is limited information on the runoff and the nutrient delivery from these tillage systems and their ultimate effect on the environment. As the intensity of cultural practices for crop production increase, there are increasing risks of undesirable environmental effects. Their potential contribution to groundwater supplies is likely to change as new cultural practices are developed. Research is needed to understand the intricate working of these systems and how the farmer can interact to make intelligent management decisions that will minimize the contamination of the groundwater supplies from soluble fertilizers and pesticides.

The soils of the north central states are some of the most fertile and productive in the world, but they must be properly managed and protected to sustain long-term productivity. Erosion leads to significant losses of organic matter and environmental degradation and can threaten the long-term productivity of the crop land in this area. One area of erosion research with limited information is the effect of the freeze-thaw cycles in our northern climates on the soil properties and the subsequent effect on erosion and off-site damages. This research is appropriate in Minnesota where severe soil loss can occur during brief periods from a combination of snowmelt and rainfall during intense spring storms.

Research is needed to provide land owners with the tools to develop soil and water conservation resource management systems to protect and stabilize the crop production within the climate constraints of the area. Tillage systems such as no till and minimum till can reduce soil erosion and sustain or even enhance productivity. However, there is a serious lack of knowledge about the long-term success of these practices with regard to soil types, plant varieties, fertilizer needs, cropping sequences, and pest management.

Water quality is a critical concern in many parts of Minnesota and will become even more critical as the demand for water increases. The unique combination of research scientists at the Morris Lab provide for an interdisciplinary team to attack problems in protection and efficient use of our water resources. Research is needed on how to utilize agronomic plants to reduce pollution of groundwater and surface waters. A comprehensive system of plant management is required in the development of new tillage systems. Proper variety selection and/or optimizing the plant spacing and population can be used to achieve earlier canopy closure. Earlier crop canopy development during the spring can protect the soil from raindrop impact and minimize soil losses and result in lower herbicide costs because properly spaced plants will be more competitive with the weeds. Earlier canopy cover also can reduce soil evaporation losses and result in more water available for transpiration and increased crop water use efficiency. Research is needed on identifying the crop varieties or alternate crops with high leaf area expansion rates that perform well in conservation tillage systems. Information is needed on the environmental, physiological and morphological factors limiting early leaf area development in the northern climates.

The research program at the Morris laboratory continues to focus on providing knowledge and recommendations for the development of cost effective production systems for the Northern Corn Belt. The broad mission of the laboratory is concerned about the profitability in agriculture through the development of improved soil and water management practices that will improve water quality. We fully support these research areas and solicit additional resources for the laboratory and for additional scientific positions. A current need is a systems analysis person to assist in the integration of the various components of production systems into user oriented models. This effort would allow for more effective utilization of the research information obtained by the individual scientists and would provide a more effective extrapolation of the physical processes involved to other climates and soils. The products of this reseach will be the basic information that will lead to solutions of agricultural problems in the North Central Region. Specifically, recommendations to reduce risk of production failures while protecting soil and water resources will be provided for major soils in the Region. The technology will transfer to farmers and action agencies to assist in selecting profitable conservation production systems.

HE GOT TOP YIELDS WITH UNLIKELY METHOD

When farmers began leaving more crop residue on their fields instead of plowing it under after harvest each fall, they talked about their fuel savings and lessening the wear and tear on machinery.

Other farmers liked the fact that this technique, known as conservation tillage, sharply reduced soil erosion.

Almost nobody expected higher yields. If anything, corn farmers hoped the yield loss they anticipated wouldn't totally offset their cost savings.

So when Guy Ewald of Waseca County used conservation tillage to produce the most corn and soybeans per acre in Minnesota last year, farmers took notice.

Ewald's feat was a little like having your ace pitcher lead the league in hitting. His accomplishment was special because Ewald used the most extreme of the conservation tillage methods—no-till planting—to lead yield contests sponsored by growers associations.

No-till means a farmer plants the current crop straight into last year's crop residues, without even the minimal working of soil that's used in other conservation tillage styles.

But Ewald's high yields don't surprise people who know him. Bill Anderson, an agronomy instructor at the University of Minnesota's Waseca campus, recalled that Ewald was little better than an average student before he got a degree in crop production and animal science.

The difference, Anderson added, was that "when he got out of school, he didn't quit learning."

Ewald, 28, farms near Waldorf with his brother, Lynn, 29, who handles the farm's purebred beef cattle, and their father, Lyle, in a family corporation called Fair Acres Stock Farm. His winning yields came from a 50-acre test plot where Ewald experiments to see what factors are limiting his crops from reaching their potential.

Small portions of that plot produced yields of 65.9 bushels per acre for soybeans and 218 bushels per acre for corn. That dwarfs the state averages of 35.5 bushels for soybeans and 122 bushels for corn. Last year was the second straight year Ewald won the soybean contest; the victory in corn came in only the second year he had entered the contest.

"Our intentions are not really to win the yield contest, but to apply the things we learn from our yield plots," Ewald said. "Actually our whole farm is a big test plot. We run a lot of comparisons." For example, he said they compared 27 varieties of soybeans and 45 corn hybrids in their test plot.

Despite the high yields, Ewald said the primary goal is producing the most profit per acre. So his efforts to increase yields are accompanied by cost-cutting experiments. He figures his no-till soybeans cost $16 to $18 per acre less than the method he previously used because there is less use of labor, fuel and machinery.

To combine the yield comparisons with the cost-cutting experiments requires hours in front of a computer following his long days of planting, tending and harvesting the crop. Ewald supplements those analyses with information gleaned from a crop consultant, agribusiness experts and university experts.

"He visits quite frequently," said Bill Lueschen, an agronomist at the university's Waseca experiment station. "A few weeks ago he was in here wanting to know if there was anything new he should be trying this year."

Success stories like Ewald's have helped promote conservation tillage throughout the state, although no-till planting is used on less than 1 percent of the state's land. But reduced-tillage techniques were used on another 25 percent of Minnesota's crop acreage last year, according to the Conservation Technology Information Center, a clearinghouse on such practices. The 26 percent total for either no-till planting and reduced tillage is up from 20 percent in 1985.

NATIONAL ASSOCIATION OF STATE FORESTERS

STATEMENT OF JOHN BETHEA, STATE FORESTER, STATE OF FLORIDA

Senator BURDICK. The subcommittee will come to order.

Our next witness is Mr. John Bethea, state forester of Florida, National Association of State Foresters.

Mr. BETHEA. Thank you, Mr. Chairman.

I am John Bethea, the state forester of Florida and a member of the legislative committee of the National Association of State Foresters. I am here today representing the association.

First, I would like to thank you and the committee for your support over the years of the programs that the National Association of State Foresters have an interest in, and we are involved in.

Today, I would like to comment on a number of programs. I have a prepared statement, which I would like to file for the record, and then in the interest of time lift out some of the points from the programs that we are concerned with.

The first program that I would like to talk about is the Forestry Incentive Program, which is a cost-sharing program, which is cost shared with landowners for reforestation of their land, and for timber stand improvement, improving the quality of the timber that is on the land.

As you know, this nation has never reached its potential for the production of wood products, and the production of wood fiber is critical, especially to many small communities for the economic health of that community, and also for domestic consumption of wood products. Now more than ever, we need to export timber and timber products.

Currently, in the last 3 years, we have had a $5 billion net deficit in timber into this country. Currently, the association is working with others on an export program, which we hope to get going in 1988. We have filed with the Congress that request, and we hope that this committee, although it is not coming from this committee, will support that effort, because it is critical to the forest industry, forest landowners of this country.

The land is still not being reforested. In 1974, which is when the Forest Incentives Program was enacted, it had shown to be a very cost effective program, and also leveraged many other effective forestry work. It provides for landowners to do work which otherwise wouldn't be there because they couldn't be assured of cost of employment. Also, it is kind of monkey see, monkey do, when forest landowners are planting under the incentives program, others plant, too.

It has been said that many landowners wait to get cost share money through the incentives program, but I am persuaded that this is really not the case. All we are asking for is continuation of the program at the present funding level of $11.9 million.

Another program that we are mightily concerned about is the Rural Community Fire Protection. This is a small program of $3.2 million, and we are again asking that that simply be continued level funding. This provides cost sharing for rural and community fire departments, most of which are volunteer. Again, it leverages funding and also encourages much volunteer work in these programs.

In 1985, with more and more people moving to the rural areas, and into the woods, we lost or there were 400 severely damaged residences, and that is more than we lost in the entire history of the Division of Forestry, and its fire prevention program. So that is a very critical program.

Another thing that I would like to highlight is the McIntire-Stennis research funding. You have already heard today much discussion about the need for research, and there is, of course, a research program in the USDA Forest Service, but the McIntire-Stennis, which was authorized in 1964, provides funding to state universities and other public institutions on a cost-share basis for research and also for graduate studies.

This is very vital in that it will provide funding for projects that are somewhat local in nature, or regional in nature, whereas the Forest Service research primarily is national in scope. We believe that this program is very effective, and it gives much support to the small, private landowners in this country through the university research and through the graduate studies.

The Conservation Reserve, which is a relatively new program, is probably as important an issue as will come before this committee this session. It is working. It is working well. I believe that it is going to do the things that it was intended to do, and that is reduce soil erosion, reduce the crop surplus that we have, and produce wood fibers for domestic use and export.

The CCC funding ends in 1987, unless the Congress renews that. We would hope that this committee would look to continuing that funding, either through CCC or through the normal budget process. It is an effective program, and we think that it is one of the most important to come before you in this session.

Mr. Chairman, I would like to thank you for your time. I appreciate the opportunity to visit with you today on behalf of the National Association of State Foresters on these vital forestry conservation programs.

Senator BURDICK. Thank you very much.

I would think that your goal would be to keep the forested acres steady.

Mr. BETHEA. No, sir; I don't think that this will be the specific goal. I think acres that are being forested because of erosion, or other purposes, will sustain farms. If the land is not evaluated for a higher use, then I think that it ought to be in trees.

The thing I think that is hurting this country is open land or wasteland. All it is doing is holding the world together. It should be in trees. As I mentioned, many, many acres that are in row crops are now eroding, and they should be in trees or grass.

No, sir; I don't think that we ought to set a goal of the same number of acres, or more or less. I think that we ought to run our business the way it ought to be run, that is in the best interest of our country and to society.

Senator BURDICK. Thank you very much for your contribution.

I will have to again go and vote. I will be back in 15 minutes.

[A brief recess was taken.]

[The statement follows:]

STATEMENT OF JOHN BETHEA

Mr. Chairman and members of the Committee, I am John Bethea, State Forester of Florida and member of the Legislative Committee of the National Association of State Foresters (NASF).

The members of the NASF are the directors of the state forestry agencies of each state. The primary responsibility of their agencies is to conduct forestry work for the public good on state and privately-owned forest land in their respective states. They work cooperatively with private, federal and other state agencies, organizations and individuals in directing and strengthening all forestry programs within their states.

We welcome this opportunity to appear before you to discuss the importance of the Forest Incentives Program (FIP), funded in the Agricultural Stabilization and Conservation Service budget; the Rural Community Fire Protection Program (RCFP), funded in the Farmers Home Administration budget; McIntire-Stennis Research Funding; Renewable Resource Extension, and the Conservation Reserve Program authorized in the 1985 Farm Bill.

The Committee appropriated $15.1 million for FIP and RCFP last year--$11.9 million for FIP and $3.2 million for RCFP. For 1988, the Administration proposes a zero budget for both programs. NASF recommends $11.9 million be appropriated for FIP, and $3.2 million for RCFP--a total of $15.1 million.

STATE AND PRIVATE BUDGET
(Millions)

	1987 Appropriation	1988 ADM.	1988 NASF REQUEST
Forestry Incentives Program (FIP) (ASCS)	$ 11.9	$-0-	$ 11.9
Rural Community Fire Protection (RCFP) (FmHA)	3.2	-0-	3.2

FORESTRY INCENTIVES PROGRAM (FIP)

Our nation has the potential to significantly increase the production of wood fiber on privately owned land. The growing, harvesting and processing of wood provides jobs and economic stability to many communities as well as a supply of consumer products for people. In addition there is an increasing need for export material to help reduce the trade deficit now troubling our nation.

Unfortunately, too many private landowners harvest their timber without making the necessary investment to reforest the cutover area. Many lack the capital required for this type of expenditure and are reluctant to borrow money because of the long-term nature of a forestry investment. In most cases, they're faced with the necessity of repaying the loan in a few years, while having to wait 20-25 years or more for a return of their investment.

These private landowners own or control nearly 60 percent of our domestic commercial timberland and account for about 45 percent of the roundwood timber supply. By 2030, these lands are expected to provide almost 60 percent of the total roundwood supplies. The USDA Forest Service estimates that some 1,000,000 acres a year in the South alone are reverting from productive pine timber to brush and low quality hardwoods. The Forest Service reports that the major cause is inadequate or nonexistent regeneration following harvest. Other losses include high mortality due to forest insects & diseases, forest land being converted to other uses, and the reduction in tree growth in many regions.

The FIP Program, which Congress approved in 1974, helps offset the obstacles to long-term investment in forestry which include high interest rates, long-term cash commitments and protection of forestry investments. Unfortunately, the situation has reached the point where we not only need cooperative programs like FIP, but also need tax credit incentives and technical assistance to encourage the 7.8 million owners of private nonindustrial forest land to plant their unproductive acreage in trees for the future.

The Conservation Reserve Program and the Agriculture Conservation Program have an effect on forestry, but their primary mission is to conserve soil and water. While they will have long-range benefits on forestry, they will have no effect on many acres of forest lands that have been harvested and then left idle.

This very cost-effective Forest Incentives Program is filling a very critical reforestation need and should be continued. The National Association of State Foresters requests approval of a budget of $11.9 million for the 1988 fiscal year.

RURAL COMMUNITY FIRE PROTECTION (RCFP)

The American people love the outdoors. Now there is a developing trend to move their homes--and their businesses as well--out of the cities and into rural areas and more natural surroundings. This trend is causing concern in these areas because lives and property are threatened when wildfires occur.

In 1985 wildfires did extensive damage in the eastern states from Florida to Maine. Idaho, Nevada and California were also hard hit. In addition to the forest lands burned, over 1400 homes and other structures were destroyed or damaged and 44 lives lost. This year, wildfires have been widespread from Texas and Oklahoma to the Virginias and the Carolinas, into Georgia and Alabama. It is no longer a case of simply protecting the natural resource. Now firefighters are finding themselves in the position of having to protect structures built in close proximity to flammable, native vegetation.

There doesn't appear much likelihood of this trend being reversed, so fire management techniques must be changed. The special nature of fires in the urban-rural interface frequently forces firefighters to fight both wildland and structural fires. Fire personnel who are not accustomed to suppressing wildland fires must be trained to fight structural fires, and municipal fire departments trained and equipped to fight wildland fires.

Fire protection for improvements in rural areas will depend more and more on volunteer and small community fire departments. The Rural Community Fire Protection Program provides financial and technical assistance to train, organize and equip rural fire departments.

To better protect the urban-rural interface, the National Association of State Foresters recommends the 1988 appropriation for RCFP be approved at $3.2 million. This $3.2 million must be matched by at least a like amount of local funds in addition to the millions of dollars of volunteer time given to protect life and property.

MCINTIRE-STENNIS RESEARCH FUNDING

Underlying the forest development and protection responsibilities of the state forestry agencies is the need to generate new technology and methodology which can increase the efficiency of forest management and development, and reduce loss of forest values through insect and disease and fire.

It is significant that the total support for the federal/state forestry research has decreased significantly in inflation-adjusted dollars concurrently with increasing needs for more sophisticated forest and forest products technology. The NASF is highly concerned about this trend which adversely impacts on the effectiveness of state forestry agencies to bring about cost-effective forest development and protection technology.

The state forestry agencies depend primarily on the state universities and the U.S. Forest Service for the research and technology support base. While certainly many research needs are national in scope and deserve a national approach, the individual schools play a major role in emphasizing the research and technology needs in their individual states and regions.

Appropriations for the McIntire-Stennis Research Funding has increased only modestly since 1964. This Act authorized the Secretary of Agriculture to provide assistance on a matching basis to land-grant colleges--agricultural experiment stations and other state supported colleges or universities offering forestry education.

The NASF recommends that funding for this research program be increased to $25 million for 1988 to insure the continued effectiveness of the Act and to significantly strengthen the role of technology in increasing forestry competiveness while providing greater non-commodity benefits from our forestlands.

RENEWABLE RESOURCE EXTENSION

Targeting is recognized as an effective way to direct limited funds to priority needs. The Renewable Resource Extension appropriation is targeted to support the nation's need for a continuous supply of forest resources. It is a major factor in the transfer of needed forest technology to nonindustrial private forest landowners (who own most of the commercial forest land in the United States) as well as industry and business enterprises involved with management and utilization of forests.

The NASF recommends that authorization for this program be continued and funded for 1988 at the current level of $2.4 million.

CONSERVATION RESERVE

The NASF believes that there is no conservation issue to be considered by this Committee more important than the Conservation Reserve Program authorized by the 1985 Farm Bill. Beginning in fiscal 1988 funding must be provided through the normal appropriations process, unless the CCC funding is continued, since funding from this source expires at the end of the fiscal 1987.

The Program is now in place and working well and has demonstrated that it is cost-effective in reducing soil erosion and in reducing surplus agricultural commodities. Also acres planted to trees will provide needed long-range timber production and other environmental benefits.

Farmers should be encouraged to place trees on all acres suited to tree growth because forest cover is more permanent than other vegetation and it is important in preventing and reducing soil erosion, improving water quality and contributing to better wildlife habitat.

Additionally, trees are a crop and a source of needed raw material. Forestry has become a viable economic component of many farm operations and needs to be recognized and supported. Recent forest inventories and assessments reveal a deficiency of preferred species in some parts of the country which will lead to shortages in the future.

There is no more compelling resource priority than the protection of the soil that we as a nation depend upon, either directly or indirectly, for our food. Also, profitability must be restored to agriculture if it is to survive. Costs must be reduced for this to happen. Forestry has a significant role in both of these arenas.

The 1982 National Resources Inventory showed that nearly one-quarter of the nation's crop land was eroding at an average rate more than four times higher than the currently accepted tolerance level. Of significance is the fact that this inventory, as did the one before it in 1977, showed that a major part of the erosion problem occurred on a relatively small percentage of the total crop land acreage.

If highly erosive soils are placed in the Conservation Reserve and planted in trees, erosion rates would fall dramatically. Soils that are protected by trees and other kinds of permanent cover have minimal erosion rates. In addition, dollars would be saved for the Treasury by not being spent to subsidize the crops that would otherwise be produced on these marginal lands.

There are other areas where forestry can stop soil erosion and simultaneously reduce input cost for farming. Wind-caused soil erosion is a major problem in the Great Plains. A system of properly designed and appropriately spaced field windbreaks protecting the land could reduce wind erosion to virtually zero.

These are difficult times, not just for agriculture, but for the nation. Nevertheless, our soil and water resources are the underpinnings of our future and the National Association of State Foresters believes that it is appropriate to continue funding for the Conservation Reserve Program authorized by the 1985 Farm Bill.

AMERICAN FORESTRY ASSOCIATION

STATEMENT OF R. NEIL SAMPSON, EXECUTIVE VICE PRESIDENT

Senator BURDICK. The subcommittee will come to order.

The next witness is Mr. Neil Sampson, executive vice president of the American Forestry Association.

Welcome to the committee.

Mr. SAMPSON. Thank you, Mr. Chairman.

I am Neil Sampson, executive vice president of the American Forestry Association. We have submitted a statement, and in the interest of time, I would like to simply note a few of our concerns.

Senator BURDICK. We appreciate that.

Mr. SAMPSON. Our members have expressed a great deal of concern about the administration's proposal to cut back the soil and water conservation programs, to cut back the cost sharing programs, such as the Forestry Incentives Program, and the Agricultural Conservation Program, and to cut back on the Renewable Resources Extension Act funding, and the Extension Service.

I would just like to point out that we feel very strongly that the base conservation program area of the Soil Conservation Service needs to be maintained, and it will take, as best as we can tell, $650 million this year. In addition, the service does need to have the funding that is required to fulfill its obligations under the new farm bill and its programs. The supplemental appropriations seems to have been working in the right direction, and we are strongly in support of that.

In the Extension Service, Mr. Chairman, the very small Renewable Resources Extension Act Program, RREA, has been funded at about $2.5 million a year for about 3 or 4 years. Studies have shown that every $1 of federal money that goes out under the Extension System through this route has brought out $3 of state and local extension money.

Good extension programs and education programs are focused on natural resource issues, forestry, wildlife, and others, and simply didn't exist historically under the previous extension programs. We are really pleased to see that expansion.

We are recommending an expansion of that program to a $4 million level, to allow it to work in all 50 states. It currently is not able to work effectively at the $2.25 million level.

The Forestry Incentives Program, as you have heard today, has been a very, very good program in helping people do reforestation. Between it and the Conservation Reserve, we are getting a great deal of acreage planted on any land that should have them.

I am reminded now that a great deal of economic activity and a great deal of development has been created particularly in the South. I think that 20 or 25 years from now, we will be very pleased that we went through this sort of investment now when they look at two things. One will be the crop that will be there, and the other will be that the land will still be there as a result of that investment.

I think that it is a very wise investment, and we appreciate the committee's support, and we urge you to continue your support.

Thank you very much.

Senator BURDICK. Thank you very much for your contribution.

[The statement follows:]

STATEMENT OF R. NEIL SAMPSON

SUMMARY: The American Forestry Association supports maintaining the vital soil and water resource management programs of the Soil Conservation Service, and the Forestry Incentives Program and the Agricultural Conservation Program of the ASCS -- at current service funding levels. We support expansion of SCS's capacity to implement the conservation provisions of the 1985 Farm Bill while maintaining traditional conservation operations. AFA also recommends the expansion of the Renewable Natural Resources Extension budget of the Extension Service to the $4 million level.

The American Forestry Association, the national citizen's organization for trees, forests, and forestry, is deeply distressed by the proposed reductions to the U.S. Department of Agriculture's conservation budget for FY 1988.

We believe, Mr. Chairman, that it is "false economy" to trade away the nation's proven, traditional soil and water conseration programs -- which have for years provided the backbone of our conservation efforts -- for the promising new programs being implemented under the 1985 Farm Bill. And that is why we recommend that SCS's traditional programs -- including technical assistance, soil surveys, watershed protection, Resource Conservation and Development, and others -- be funded at a current services budget level of $650.3 million in FY 1988. Additional funds will be necessary to meet the added program demands of the 1985 Farm Bill.

The President's budget recommendations label as "non-essential," programs which have effectively developed and protected the productivity of our agricultural and natural resources -- the very resources that have helped this nation assume its position as a world leader. These recommendations demonstrate the Administration's ignorance not only of the ongoing nature of the fight to protect soil and water resources, but also of the fundamental relationship between our food and fiber production capabilities and national stability. The Administration's budget would devastate resource stability and productivity in years to come.

Soil erosion, for example, is as serious in many respects today as it was in 1935. In some regions in the breadbasket of the Nation, two acres out of every three are suffering more than tolerable soil loss, according to the 1982 National Resource Inventories. To meet such challenges, Soil Conservation Service technical professionals currently work with conservation district staff and state agency staff to provide technical assistance on more than 60 million acres of land, nationwide. In addition, the conservation provisions of the Farm Bill have created a substantial new workload for technical employees at all levels. The Conservation Reserve Program and the Conservation Compliance requriements, for example, mandate the development of soil conservation plans on nearly 118 million acres of cropland by 1990.

We must meet these challenges, Mr. Chairman, by continuing to fund traditional conservation programs at current levels, while expanding SCS capacity to implement the Farm Bill. The supplemental appropriations bill developing in the House includes a mechanism to provide additional SCS funds via the Commodity Credit Corporation, and AFA applauds the work of this Subcommittee in crafting this legislation. Clearly, our forestry, conservation, and agricultural efforts have already done their share of shrinking in these deficit-conscious times. We can not afford to terminate the modest investments that we as a nation have made in our most basic of resources, our soil and water.

Other Administration budget proposals are notably ill-advised, including the dismantling of the Renewable Natural Resource Extension Act program (RREA). When RREA was passed in 1978, it enjoyed broad-based support from conservation organizations including wildlife and grazing, as well as forestry interests. Its primary function is to encourage the delivery of technical information and advice to nonindustrial landowners. These people are the decision-makers on 58%

of the nation's forestland, and 64% of our rangeland. Their attitudes and management decisions not only affect the level of natural resource commodity outputs from these lands, but also control the potential of these lands to provide wildlife habitat, soil and water protection, and outdoor recreation opportunities.

RREA encourages educational programs leading to more efficient, environmentally sound management of this vital component of our country's range and forest resource base. Federal support of these natural resource extension efforts serve as a magnet attracting funds from both private and public agencies and organizations for resource education programs. For every state level natural resource staff position provided by federal funds, state and local funds have generated 3 additional positions. We urge you to establish FY 1988 funding at $4 million, which would maintain a viable program, and finally achieve the goal of involving every state in the effort.

The Agricultural Conservation Program has also gone through intensive review and improvement in recent years. It was funded at a level of $190 in fiscal '85 and '86, but is proposed for elimination in fiscal '88. We believe that funding for this program should be maintained at the current $177 million level to cope with some of the very serious economic and conservation problems this country and its farmers are facing. We believe that the farmlands so vital to our future are experiencing levels of erosion and losses of soil fertility that must be controlled in order to protect the continued productivity of these lands.

ACP cost-sharing encourages the installation of erosion control measures which protect both our land and water resources. Our nation as a whole benefits from the prevention of serious topsoil losses and water quality problems; the ACP program is needed to continue the fight for soil and water conservation.

AFA is concerned with the elimination of the Forestry Incentives Program in the President's budget. Arguments are made that the federal government should not be supporting reforestation activities on private lands. That is an activity, supposedly, that should be the responsibility of state and local institutions or the forest products industry's small woodland owner assistance program. Although we strongly support a cooperative approach to encouraging good management and reforestation, we feel that the federal government has an important part to play in this area. State and local agency budgets and the forest products industry cannot handle the job alone.

A recent Forest Service report, "The South's Fourth Forest: Alternatives for the Future," indicates that net annual growth of both southern softwood and hardwood timber has leveled-off or started to decline, and suggests that the major opportunity to increase timber supplies lies with nonindustrial private forestland owners. The Forestry Incentives Program has demonstrated its effectiveness in bringing about more acceptable levels of regeneration on cut-over lands and is a cost-effective method of addressing this problem. AFA recommends that the FIP effort receive $11.9 million in FY 1988.

We appreciate this chance to express our views.

NATIONAL POTATO COUNCIL

STATEMENT OF BOB SANDERS, PRESIDENT

Senator BURDICK. Our next witness is Mr. Bob Sanders, president, the National Potato Council.

Mr. SANDERS. Thank you, Mr. Chairman, and good afternoon, Mr. Chairman.

My name is Bob Sanders. I am president of the National Potato Council. I am a potato grower from Harper, OR. To my right is Mr. Larry Youngst, who is vice president in charge of legislative affairs, also for the National Potato Council, who resides in Michigan.

The National Potato Council is a national trade association representing approximately 12,000 potato growers in 37 states. Our growers produce both seed potatoes and potatoes for consumption in a variety of forms.

The potato is the most popular of all vegetables grown in the United States. Annual per capita consumption is 120 pounds, up from 107 pounds in 1962, and seems to be increasing due to the advent of new products and heightened public awareness of the potato's excellent nutritional value. It is considered a stable consumer commodity and an integral, delicious component of the American diet.

The potato crop has been traditionally controlled by supply and demand in a free market. Government support programs such as price-guarantees and acreage set-aside have not been necessary.

However, like any other major commodity, potato growers recognize, in order to remain a viable and competitive industry, we must constantly strive to improve our products. Through carefully planned and executed research, we believe we can continue to offer an excellent product and remain a viable U.S. agricultural industry.

At the 1984 annual meeting, grower delegates voted to have the National Potato Council's Managers Advisory Committee determine what growers considered to be major national researchable problems. A comprehensive national potato survey was taken. As a result, a number of vital national research issues were identified. These were compiled into nine workable individual proposals, which were then prepared by scientists associated with the potato industry.

Currently, the Agricultural Research Service supports federal potato research projects at a funding level of approximately $5 million annually. It is important, at this point, to differentiate between regional research priorities and those research priorities designed to help the potato industry on a national level.

As with the other commodities, variations in regional areas exist and are being addressed on the local level. The current level of ARS funding is directed at these regional problems and should be maintained separate from the national nine-part proposal we are here to discuss.

The survey results identified nationwide problems that require unique national solutions. The resulting nine-part proposal requires an additional $8.697 million for the first year. The project identified in this proposal include research for: ring rot disease, early dying disease, aphids, potato beetles, weeds, varietal development, agricultural engineering, soils, and marketing.

These projects are deemed to be the most essential national research projects to improve potato production throughout the nation. For example, research would be conducted in diseases which affect the industry's ability to promote exports and reduce market losses, thereby ultimately benefiting the domestic consumer. Further, the National Potato Council believes these research proposals will enhance the overall marketable production of potatoes, therefore, benefiting the grower and consumer without reliance upon costly Federal production subsidies.

Each of the nine proposals is outlined in detail, and includes recommendations concerning the objectives of the research, as well as a suggested funding level. If permitted, Mr. Chairman, I would like to submit a copy of the full proposal to be included in the hearing record.

As noted earlier, the NPC has worked with USDA to compile this research. We have also circulated copies of the proposal to those Representatives, Senators, and staff who have a strong interest in supporting the potato industry. We hope to continue this rapport with you and members of your subcommittee to begin the process of funding this vitally important research.

At this time, Mr. Chairman, I wish to extend to you again my appreciation for being able to meet with you at this time.

Senator BURDICK. Thank you very much.

Do all the regions of the country that produce potatoes support your proposal?

Mr. SANDERS. Yes, sir; the research questionnaire that went forward went to all growing areas of the United States, and this is the result of their responses to the survey. Also, this proposal you have before you is the result of a unanimous decision by resolution of the National Potato Council which represents the growing areas of this country.

Senator BURDICK. Where do you expect the research will be taking place?

Mr. SANDERS. Mr. Chairman, at this time, the National Potato Council being a national organization, does not recommend locations where this should be done. Our concern is that when the allocations are made, that the best scientists on the subject matter, pursuant to each proposal, be identified, and also where the best facilities are, so that the research can be done with the highest level of expertise with the least amount of cost.

Senator BURDICK. Thank you very much.

Mr. SANDERS. Thank you, sir.

[The statement follows:]

STATEMENT OF BOB SANDERS

SUMMARY OF REQUEST

The National Potato Council, representing all 12,000 domestic potato producers, requests funding for its National Potato Research Proposal. The proposal includes nine individual nationally-identified research projects including the following: 1) Ring Rot Disease; 2) Early Dying Disease; 3) Aphids; 4) Potato Beetle; 5) Weeds; 6) Varietal Development; 7) Agricultural Engineering; 8) Soils; and 9) Marketing. First year funding for the nine projects is requested at a level of $8.697 million.

Good morning Mr. Chairman and members of the Subcommittee. My name is Bob Sanders. I am President of the National Potato Council.

The National Potato Council (NPC) is a national trade association representing approximately 12,000 potato growers in thirty-seven (37) states. Our growers produce both seed potatoes and potatoes for consumption in a variety of forms. Annual production during the last decade, 1975 to 1984, averaged 353,896,000 hundredweight with a value of $1,572,444,000. Total value is substantially increased through processing. The potato crop clearly has a positive impact on the U.S. economy.

The potato is the most popular of all vegetables grown in the United States. Annual per capita consumption is 120 pounds, up from 107 pounds in 1962, and seems to be increasing due to the advent of new products and heightened public awareness of the potato's excellent nutritional value. It is considered a stable consumer commodity and an integral, delicious component of the American diet.

The potato crop has been traditionally controlled by supply and demand in a free market. Government support programs such as price-guarantees and acreage set-aside have not been necessary. The potato industry, unlike many other commodities has been self-supporting. However, like any other major commodity, potato growers recognize, in order to remain a viable and competitive industry, we must constantly strive to improve our product. Through carefully planned and executed research, we believe we can continue to offer an excellent product and remain a viable U.S. agricultural industry. At the 1984 annual meeting, grower delegates voted to have the National Potato Council's Managers Advisory Committee determine what growers considered to be major national researchable problems. A comprehensive National Potato Research Survey was taken. As a result, a number of vital national research issues were identified. These were compiled into nine workable individual proposals, which were then prepared by scientists associated with the potato industry.

To the best of our knowledge, no other agricultural industry has made a similar effort to systematically determine the national research needs of its industry in order to improve the quality, marketability and future of its commodity. In addition, we have worked closely with Department of Agriculture research experts to ensure the credibility and necessity for these nine proposals. I might add they have been extremely helpful and encouraging.

Currently, the Agriculture Research Service (ARS) supports federal potato research projects at a funding level of approximately five million annually. It is important, at this point, to differentiate between regional research priorities and those research priorities designed to help the potato industry on a national level. As with many other commodities, variations in regional areas exist and are being addressed on the local level. The current level of ARS funding is directed to these regional problems and should be maintained, separate from the national nine-part proposal we are here to discuss.

The survey results identified nationwide problems that require unique national solutions. The resulting nine-part proposal requires an additional $8.697 million for the first year. The projects identified in this proposal include research for: 1) Ring Rot Disease; 2) Early Dying Disease; 3) Aphids; 4) Potato Beetles; 5) Weeds; 6) Varietal Development; 7) Agricultural Engineering; 8) Soils; and 9) Marketing. These projects are deemed to be the most essential national research projects to improve potato production throughout the nation. For example, research would be conducted in diseases which affect the industry's ability to promote exports and reduce market losses, thereby ultimately benefitting the domestic consumer. Further, the National Potato Council believes these research proposals will enhance the overall marketable production of potatoes, therefore benefitting the grower and consumer without reliance upon costly federal production subsidies.

Each of the nine proposals is outlined in detail, and includes recommendations concerning the objectives of the research, as well as a suggested funding level. If permitted, Mr. Chairman, I would like to submit a copy of the full proposal to be included in the hearing record.

As noted earlier, the NPC has worked with USDA to compile this research. We have also circulated copies of the proposal to those Representatives, Senators and staff who have a strong interest in supporting the potato industry. We hope to continue this rapport with you and members of your Subcommittee to begin the process of funding this vitally important research.

NATIONAL COTTON COUNCIL

STATEMENT OF ROBERT A. CARSON, JR., COTTON PRODUCER

Senator BURDICK. The next witness is Mr. Bobby Carson, National Cotton Council.

Mr. CARSON. Thank you, Mr. Chairman.

I am Robert A. Carson, Jr., a cotton farmer from Mississippi. I started as an advisor to the National Cotton Council, and a member of its Technical Services Committee. The council represents the producers, processors, and handlers in 18 cotton producing states. With your permission, we would like to submit a full statement to be included in the record.

We vigorously support a balanced reduction in the federal deficit. However, we recognize that agriculture cannot accomplish this task alone, or even a major part of it. But, we are willing to do our part because reducing the federal deficit is the surest way to assure the dollar is in a favorable relationship with other currencies and makes us more competitive in world markets.

A pressing issue that directly relates to the deficit and a strong agricultural economy is the public investment in agricultural research and extension. We feel that maintaining adequate budgets in both of these areas is not only a necessity, but a sound national investment that will pay dividends far in excess of the cost.

U.S. agriculture is up against stiff and growing competition from markets at home and abroad. In virtually all of our markets, we must now compete with foreign production. We have begun to recover many of the markets we lost in recent years, and I am pleased to say that in cotton and rice, the farm program is definitely working.

However, we must continue to seek ways to reduce our costs of production. We must not only strengthen American agriculture, but strengthen the nation's economy. For this reason, we are compelled to recommend adjustments in USDA's proposed fiscal year 1988 budget for agricultural research, extension, and APHIS inspection programs.

We note that the President's budget would eliminate earmarked funds in extension. This includes $7.2 million for the pest management programs, which have been highly effective in reducing grower costs, and $1.6 million for the pesticide impact assessment program, which helps to keep a reasonable benefit/risk balance in pesticide regulations. We ask that these funds be restored.

A 5.2-percent increase over the 1987 appropriation is proposed for the Agricultural Research Service. We support this increase even though it is considerably below the needs of the program. A well-funded, balanced program of basic and applied research is critical to meet the near- and long-term needs of agriculture and the American consumer.

We also ask that the special grants program of USDA's Cooperative States Research Service be restored.

The APHIS programs play an important role in protecting crops from infestations and spread of diseases and insects. Notable among these are efforts to contain the pink bollworm in the Western states and to eliminate or contain the boll weevil in many of the cotton region states.

The proposed 1987 budget recommends a 52-percent cut in APHIS's pink bollworm budget to $1.09 million. This would wipe out the federal/state quarantine program which has worked so very well for many years. We request that these funds be restored.

We are also concerned about the program that holds the weevil in place in the Texas High Plains. The proposed cut needs to be restored.

The boll weevil eradication effort for western Arizona and the southern desert valleys of California is working well. Though the weevil populations have been reduced over 98 percent in areas under eradication treatment, the weevil has established itself in other important cotton growing areas of Arizona.

In order to stop the spread and to eliminate it in the Western states, we are requesting $2.762 million in fiscal year 1988, which is the government's cost share of continuing and expanding the eradication efforts in Arizona.

North and South Carolina farmers strongly support the boll weevil eradication effort begun in their states several years ago. It has greatly reduced production costs and it demonstrates positive results of coordinated efforts by federal, state, industry, and growers.

We are requesting $8.2 million in 1987 supplemental appropriations to expand the southeastern boll weevil irradiation program to Georgia, parts of Alabama, and Florida. We are requesting $14.8 million in 1988 for the program's second-year costs.

The program has important ecological, as well as environmental and economic benefits. It has dramatically reduced the total environmental work. North and South Carolina growers have cut the number of spray applications almost 70 percent.

The field insect ecology stays in balance for a much longer period of time into the season and thus less chemicals are required for other insects as well. Similar environmental benefits can certainly be expected as the program is expanded into Georgia, Alabama, Florida, and other parts of Arizona.

Though these programs are highly beneficial to growers, they are not effective if left up to each grower to act independently. Programs are only effective through the support of nationally coordinated efforts such as APHIS can provide.

Mr. Chairman, we thank you for your consideration, and we thank you for the opportunity to testify before you today. I will be happy to answer any questions that I may, and if I can't, I will certainly submit them in writing. Thank you, sir.

Senator Burdick. We are near the eradication of the boll weevil in North and South Carolina. What other states have a boll weevil problem, besides North and South Carolina, Georgia, Florida?

Mr. Carson. We have a terrible weevil problem in the Mississippi Delta.

Senator Burdick. You still have a problem?

Mr. Carson. We have a real problem.

Senator Burdick. Do you have any other states that have a boll weevil problem?

Mr. Carson. Yes, sir; most all of the states have some problems, except for Arizona, and North and South Carolina, which control pretty much.

Senator Burdick. They have a problem in Florida?

Mr. Carson. Yes, sir.

Senator Burdick. Thank you very much for your testimony.

Mr. Carson. Thank you.

[The statement follows:]

STATEMENT OF ROBERT A. CARSON, JR.

The National Cotton Council is the central organization of the U.S. cotton industry, representing growers, ginners, warehousemen, cottonseed crushers, merchants, cooperatives and manufacturers from California to the Carolinas.

At the Council's annual meeting in February, the 299 delegates selected by 91 separate state, regional and national organizations strongly endorsed expanded agricultural research, education and action programs. In a unanimous resolution, they expressed continuing support for ". . . appropriations for cotton and cottonseed research and extension programs conducted by USDA and Cotton Belt states — including ginning and other processing — that provide for efficient program growth to adequate levels, recognizing that such action is not inflationary and will produce public benefits far in excess of its costs."

We vigorously support a balanced reduction in the federal deficit. However, we recognize that agriculture cannot accomplish this task alone, or even a major part of it. But, we are willing to do our part because reducing the federal deficit is the surest way to assure the dollar is in a favorable relationship with other currencies and makes us more competitive in world markets.

Another pressing issue interrelated with the deficit and improved competitiveness is public investment in research and extension. We feel that maintaining an adequate research and extension budget for agriculture is a competitive necessity and represents a sound national investment that will pay dividends far in excess of its cost.

Recognizing the need to reduce government spending, we have reluctantly accepted a no-growth budget for agricultural research and extension for several years. This was done with the expectation that funding for essential projects would be provided in the future. Such has not been the case, so we are compelled to recommend several adjustments in USDA's proposed FY 1988 budget.

RESEARCH AND EDUCATION

Total research and education programs for agriculture are proposed to be reduced 11% for 1988 (agricultural research alone is to be reduced 6%). These cuts are in sharp contrast with the total federal research and development budget which includes a proposed increase of 8%. Most of the increase is for defense research and development, and while we support a strong defense program, its proposed research and development budget consumes 70% of total federal research and development funding. Agriculture's is less than 2%. In view of the fact that the nation's capability to provide food and fiber is basic to a strong defense program, we think the priority given agriculture is much too low.

Extension

Extension Service programs are proposed to be cut 21%. This untimely reduction comes in the midst of a survival crisis for agriculture when the need for extension support is great. While formula funds for states are proposed to be increased slightly, critical special programs, or earmarked programs, are to be cut completely.

With elimination of the special extension programs, funds for the extension pest management programs are eliminated. These programs are critical for agriculture and we are thereby requesting that $7.164 million be provided to restore the extension integrated management program to the 1987 level.

Also eliminated from Extension's budget are funds for pesticide impact assessment. The continued evaluation of agricultural chemicals under the pesticide impact assessment program is essential to agricultural productivity, profitability, farm safety and protection of the environment. We ask restoration of $1.633 million for this program to the 1987 level.

Agricultural Research Service

The Agricultural Research Service (ARS) is proposed to receive a 5.2% increase over the 1987 appropriations. We appreciate the increase for the Department's in-house research agency, even though it is considerably below the needs for a growth program.

We are pleased to see the proposed $7 million increase for additional research in germplasm acquisition, maintenance, evaluation, and enhancement. Loss of critical germplasm sources would be extremely detrimental to this nation and to the world. This funding will help preserve this valuable non-replaceable resource. However, the remaining part of the increase leaves little to maintain the base program for agricultural research. A well funded, balanced program of basic and applied research is critical to meeting the near- and long-term needs of American agriculture and the consumer.

Cooperative States Research Service

Funding from the Department's Cooperative States Research Service (CSRS) plays a vital role in bringing together state agricultural experiment stations, industry and the federal government to form the ideal partnership to provide answers to America's agricultural problems.

The CSRS budget is slated for a decrease of 24% from the 1986 appropriations. Though Hatch formula funds are proposed to receive a 4% increase, special grants were completely eliminated. Special grants programs include such efforts as research for National Integrated Pest Management and support of the Pesticide Impact Assessment Program. With the elimination of the special grants, the primary burden of supporting these important programs will be shifted to states and funds from Hatch Act appropriations. Nearly all special grants programs, though they may be conducted at a single state location, are regional and national in scope and are in the nation's interest. We therefore request full restoration of CSRS budgets, including Hatch, competitive and special grants to at least the 1987 appropriated level of $308 million.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Council delegates also endorsed continuation and expansion, where appropriate, of pest management and eradication programs administered by the Animal and Plant Health Inspection Service (APHIS).

APHIS programs play an important part in protecting crops from infestation and spread of diseases and insects. Notable among these are efforts to contain the pink bollworm in the western states and to eliminate or contain the boll weevil in other Cotton Belt states.

The proposed 1987 budget recommends a 52 percent cut of APHIS' pink bollworm budget to $1.09 million. In keeping with the need to continue this important program we are requesting that funds be restored to the 1987 level of $2.29 million.

We are also requesting that APHIS funds for the Texas/Oklahoma High Plains boll weevil containment program be restored to the 1987 level of $900,000. This program, which is cost-shared by growers who pay 70% of program costs, is an effective area wide management program and needs to be continued.

The boll weevil eradication effort for western Arizona and the southern desert valleys of California is working well. Though the weevil populations have been reduced over 98% in the areas under eradication treatment, the weevil has established itself in other important cotton growing areas of Arizona. In order to stop the spread of the weevil and to eliminate it in the western states we are requesting $2.762 million in FY 1988, the government's 30% cost share for continuing and expanding the eradication efforts in Arizona.

Farmers in North and South Carolina strongly support the boll weevil eradication effort begun in their states several years ago. The program has certainly reduced the cost of production and demonstrates the positive results of a program involving coordinated efforts by federal and state research, APHIS, cooperative extension, industry, state regulatory agencies and growers. Boll weevil eradication is providing for increased U. S. competitiveness in a global economy.

We requested $8.2 million in 1987 supplemental appropriations to expand the southeastern boll weevil eradication program in 1987 to include Georgia, a part of Alabama and Florida. We are requesting $14.8 million in 1988 for the second year costs of this program.

Continuation of the efforts to rid farmers of the boll weevil have important ecological and environmental as well as economic benefits. With increasing environmental concerns, the boll weevil eradication program is highly important to reducing the total environmental burden. North and South Carolina growers have reduced the number of spray applications approximately 70%. These reductions are due not only to insecticide applications for weevils being totally eliminated, but also pesticides for other insects are reduced. The field insect ecology stays in balance for a much longer period of time into the season and thus less chemicals are required. The program also employs new techniques such as sex attractants to eliminate the pests where infestations are low, further reducing the need for blanket applications of pesticides. We predict similar environmental benefits as the program is expanded into Georgia, Alabama, Florida and other parts of Arizona.

Though these programs are highly beneficial to growers they are not effective if left up to each grower to act independently. Programs are only effective through the support of national coordinated efforts such as APHIS can provide.

CONGRESSIONAL WITNESS

STATEMENT OF HON. PAUL S. SARBANES, U.S. SENATOR FROM MARYLAND

Senator BURDICK. Our next witness is the Honorable Paul S. Sarbanes, U.S. Senator from Maryland.

Senator SARBANES. Mr. Chairman, I appreciate this opportunity to express my very strong concerns regarding the proposed budget cuts in the Department of Agriculture's soil and water conservation programs, particularly those in the SCS, the Soil Conservation Service and the ASCS, the Agricultural Stabilization and Conservation Service.

These programs have been the foundation of federal soil conservation efforts during the past 50 years, and in recent years, they have been an absolutely essential element in the federal, state, and local efforts now underway to clean up the Chesapeake Bay. The administration's proposed budget for fiscal year 1988 would have a very serious negative impact on these efforts.

Let me very quickly look at what the budget proposes, Mr. Chairman, and I will submit my entire statement for the record.

First, no additional funding or resources are recommended in the budget to meet the new responsibilities placed on SCS as a result of the conservation provisions of the 1985 farm bill. As you well know, the 1985 farm bill, or the Food Security Act of 1985, contained some of the most far-reaching provisions for soil and water conservation ever enacted into law.

As a result of these new provisions, farmers' need for technical assistance have increased drastically placing a severe strain on the SCS work force. There have been some estimates that the number of additional personnel to carry out these new responsibilities would number in the thousands, yet the administration's budget request for fiscal year 1988 goes in the exact opposite direction and proposes a cut of approximately 3,000 positions for SCS from the fiscal year 1986 level.

In other words, despite the increased responsibilities and expansion of what we are trying to do in the area of conservation with respect to the soil and the water, the budget calls for reductions in personnel.

In addition, support for many traditional conservation programs, including technical training and supervision, watershed planning and operation, resource conservation and development, resource inventory and emergency flood repair would be completely eliminated. All funding, approximately $204 million, for the ASCS cost-sharing programs which have provided the seed money to encourage and enable farmers to carry out conservation practices would be eliminated.

What the budget does is shift the money around. What we are doing is that we are cutting out some programs, shifting them over to the new programs, but they are not, in effect, accepting the proposition that we have these established programs that need to be carried forward. In addition, we have developed new responsibilities which also need to be addressed.

This would result in the abandonment of existing conservation programs, which have worked so well in the past. In my own view, and in the view of conservation professionals throughout the country, this is a very shortsighted approach that would have a most serious impact on the ability of conservation districts to meet basic soil and water conservation needs.

In the Chesapeake region, where we continue to focus on the interrelationship between work of the Department of Agriculture people and the Chesapeake Bay restoration efforts, it is estimated that the SCS would require 120 positions, including 31 positions specifically provided for the Chesapeake Bay program.

This program, as you know, Mr. Chairman, has identified the importance of nonpoint source pollution as a contributor to the bay's declining water quality. It is estimated that 40 percent of the phosphates and two-thirds of the nitrogen come from nonpoint sources such as sediments and animal wastes from our agricultural land.

The SCS has been the lead agency in addressing this problem. It provides technical expertise and training in a cooperative effort to control nonpoint source pollution. These cuts would have a drastic impact on what has been achieved so far.

In fact, farmers have been cooperative in trying to develop pest management practices, which we need to encourage, and not to discourage or dissuade them from that cooperation.

Mr. Chairman, this committee has consistently demonstrated a strong support of the conservation program. I would like to thank this committee, especially, for assuring the involvement of the SCS in the bay programs. In each of the last 2 years, the committee has provided an additional $1.14 million, or a little over $1 million, to fund 31 additional positions in the Soil Conservation Service in the bay states.

That leadership on the part of the committee is beginning to show results. It has been documented that less soil and less contaminants are now reaching the bay from agricultural lands. The farmers have been a major part of this effort, volunteering to participate in the bay program, paying costs estimated at approximately $5 million in fiscal year 1985 in order to achieve these accomplishments.

Without this money and these positions, we think that the program will falter and start downward. I very strongly urge that the committee maintain levels in fiscal year 1988 comparable to those in 1987 to ensure the continued process of resource conservation in the Chesapeake Bay restoration area.

We need supplemental funds to meet the workload generated by the 1985 farm bill. I understand the House Appropriations Committee has recommended such supplemental funding. I would strongly support that, and I would also strongly urge your support in the 1988 appropriations bill in order to address this SCS question, and particularly to continue to provide us with the earmarked 31 positions.

Mr. Chairman, while I am here, I would like to mention very briefly two other important agricultural programs under your jurisdiction. One is the Beltsville Agricultural Research Center, a very important center for research on food, human nutrition, and agriculture. Many of its facilities were constructed before World War II and are in need of restoration and upgrading. Dr. Klassen, the director of Beltsville, has developed a comprehensive 8-year plan, called Renaissance 93, to bring the center up to tomorrow's standards.

In fiscal years 1986 and 1987, the Agricultural Research Service allocated $13 million for Renaissance 93 objectives. This committee provided additional money in order to accelerate those efforts, and we are most appreciative of that assistance. We hope the committee will continue to keep a focus on this program. I will be submitting additional information to the committee about the center's current and future needs, and we hope you will continue to give it, as you have in the past, a very high priority.

Finally, I simply want to thank you, Mr. Chairman. We have come before you in the past to make requests, and I would be remiss if I didn't recognize the very significant assistance that you provided last year in the appropriation for the Department's animal disease and pest control contingency fund for the avian influenza program.

Avian influenza poses a very serious threat to the poultry industry on the Delmarva Peninsula. It is a lethal disease which requires a high level of immediate and emergency control and eradication measures, and these funds will ensure that such a program is in place to combat avian flu.

Mr. Chairman, I appreciate this opportunity to come before you, and I want to underscore how much we appreciate the help and assistance which you the committee has given us in past years.

Thank you very much.

Senator BURDICK. Thank you very much for your contribution.

[The statement follows:]

STATEMENT OF SENATOR SARBANES

Thank you Mr. Chairman for this opportunity to express my concerns regarding the proposed budget cuts in the U.S. Department of Agriculture's soil and water conservation programs, particularly those of the Soil Conservation Service (SCS) and the Agricultural Stabilization and Conservation Service (ASCS). These programs have been the foundation of federal soil conservation efforts during the past fifty years and an absolutely essential element in the federal effort to clean up the Chesapeake Bay. The Administration's proposed budget for FY88 would have a very serious negative impact on these efforts.

Let's look at what the budget proposes. First, no additional funding or resources are recommended in the budget to meet the new responsibilities placed on the SCS as a result of the conservation provisions of the 1985 Farm Bill. As you know, the 1985 Farm Bill, or Food Security Act of 1985 contained some of the most far-reaching provisions for soil and water conservation ever enacted into law. These include the "sodbuster" program to discourage future cultivation of fragile soils, the "swampbuster" program to discourage conversion of wetlands to crop use and a long-term conservation reserve program to take erosion-prone land out of production. As a result of these new provisions, farmers' needs for technical assistance have increased drastically placing a severe strain on the SCS workforce. It is estimated that in order to provide the assistance necessary for the conservation work required in the 1985 Farm Bill, SCS would have to increase staff by nearly 4000. However, the Administration's FY88 budget takes the opposite approach and proposes a cut of approximately 3000 positions for SCS from the FY86 level of 11,800 to 8,800, according to figures compiled by the National Association of Conservation Districts. Despite the increased responsibilities and workload, the budget calls for a $132 million reduction or nearly 25% in SCS funds and staff.

In addition, support for many traditional conservation programs including, technical training and supervision, watershed planning and operations, resource conservation and development, resource inventory and emergency flood repair would be completely eliminated. All funding, approximately $204 million, for the ASCS cost-sharing programs which have provided the seed money to encourage and enable farmers to carry out conservation practices would also be eliminated. The budget proposes redirecting the remaining funds and staff resources for the new Farm Bill requirements. In short, what the Administration is proposing is the abandonment of existing conservation programs which have worked so well in the past, in order to address the new Farm Bill programs. In my view, and in the view of conservation professionals throughout the country, this is a very shortsighted approach. It would have a very serious impact on the ability of conservation districts to meet basic soil and water conservation needs. The proposal would also undercut one of the most fundamental components of the Chesapeake Bay restoration program. In the Chesapeake region, it is estimated that SCS will lose 120 positions, including 31 positions specifically provided for the Chesapeake Bay program.

EPA's 7-year Chesapeake Bay study identified non-point source pollution coming from agriculturally related practices as a key contributor to the declining water quality of the Chesapeake Bay. According to that report, approximately 40% of the phosphates and 67% of the nitrogen come from non-point sources such as sediment and animal wastes which enter the Bay from agricultural lands. SCS is the lead federal agency in addressing this problem. Farmers, landowners and local conservation districts depend upon the SCS for technical expertise and training in a cooperative effort to control non-point source pollution. A loss of federal support could discourage these conservation efforts, and greatly set-back what has been achieved so far. As Patrick Gardner of the Chesapeake Bay Foundation recently put it "It's been a hard road, bringing the farmers in to participate in best management practices. If you make the programs less accessible to the farmers, you lose a lot of good will." The cooperative Federal/State/local partnership needs to continue if we are to be successful in our efforts to clean up Chesapeake Bay.

This Committee has consistently demonstrated its full support of the conservation programs by providing the funds necessary to continue them. I would like to thank the Committee especially for your help in ensuring SCS involvement in the Bay programs. In each of the last two years the Committee provided an increase of $1.14 million to fund 31 additional SCS positions in the Bay area states. Your leadership is beginning to show results. Less soil and contaminants are reaching the Bay. For example, as a result of the 1985 Agricultural Conservation Program cost-sharing grants and SCS technical assistance, 8,800 farmers treated 94,000 acres of land. This prevented over 735,000 tons of soil and water from nearly 17,000 animal units from entering the water from the states of Maryland, Pennsylvania and Virginia. The farmers were the major partner in this effort by volunteering to participate in the Bay program and paying 52 percent of installation costs of $4.9 million for the accomplishments in FY85. In addition to these accomplishments, SCS provided technical assistance for implementation of state and EPA Chesapeake Bay cost-share programs. Without this needed SCS assistance, state programs could falter or fail, further threatening the Bay's future.

SCS and the Agricultural Conservation cost-share program must be maintained at the 1987 level for Fiscal Year 1988 to ensure continued progress in resource conservation and in the Chesapeake Bay restoration effort. I have previously written to the Committee to request that supplemental funds be made available to meet the workload generated by the 1985 Farm Bill. It is my understanding that the House Appropriations Committee has recommended a $20 million appropriation for this purpose. I urge the Committee to support this supplemental funding and ask for your continued support of the Soil Conservation Service and the Agricultural Conservation cost-share program in the Fiscal Year 1988 Appropriations Bill. Furthermore, I request that the Committee continue to earmark funding for the 31 SCS Bay positions.

I would also like to briefly mention two other important agricultural programs: the Beltsville Agricultural Research Center (BARC) and avian influenza.

The Beltsville Agricultural Research Center serves as the Nation's primary showcase for research on food, human nutrition and agriculture. Established in 1910, the Center is the largest and most diverse agricultural research center in the world. Unfortunately, many of the Center's facilities were constructed prior to World War II and are in need of restoration and upgrading. Dr. Waldemar Klassen, the Director at Beltsville, has developed a comprehensive 8-year plan, Renaissance 93, to rejuvenate the Center and bring it up to tomorrow's standards.

In FY86 and 87, the Agricultural Research Service allocated a total of $13 million for Renaissance 93 objectives. In addition, the Committee appropriated $1 million to accelerate these efforts, and I would like to thank the Committee for your assistance. In order to assure continued progress on Renaissance 93, and to assure that the Center can continue to make major contributions in addressing key problems of food and agriculture, additional funding will be needed this year, and in the next few years. The House Appropriations Committee recently approved a $450,000 supplemental appropriation for essential repair work at the Center. I will be forwarding some additional information on the Center's current and future needs and hope that you will continue to give the Center a very high priority.

Finally, I would like to thank the Committee for your assistance last year in providing a $5 million appropriation in the Agriculture Department's Animal Disease and Pest Control Contingency Fund for the avian influenza program. Avian influenza poses a very serious threat to the poultry industry on the Delmarva Peninsula. The lethal disease requires high level and immediate emergency control and eradication measures and these funds will ensure that a program is in place to combat avian flu.

Thank you again for permitting me this opportunity to testify before the Committee on these very important programs.

AMERICAN ASSOCIATION OF NURSERYMEN

STATEMENT OF BEN BOLUSKY, DIRECTOR, GOVERNMENT AFFAIRS

ACCOMPANIED BY:

DWAYNE JONES, DIRECTOR, AGRICULTURAL RESEARCH AND GROWER SERVICES

DR. DAVID HAMILTON, DIRECTOR, LANDSCAPE AND TECHNICAL SERVICES

Senator BURDICK. Our next witness will be Mr. Ben Bolusky, director of government affairs, American Association of Nurserymen.

Mr. BOLUSKY. Thank you, Mr. Chairman.

I am Ben Bolusky, director of government affairs with the American Association of Nurserymen. Accompanying me this afternoon, on my left, is Dwayne Jones, director of our agricultural research and grower services; and on my right is Dr. David Hamilton, who is director of landscape and technical services.

We have a rather detailed statement, and I will respectfully request that it be entered into the record in its entirety, and I will be more than happy to summarize it for you.

Senator BURDICK. Without objection.

Mr. BOLUSKY. The American Association of Nurserymen is a national trade association of the nursery, landscape, and garden center industry. It is estimated that the retail value of nursery crops sold in the United States in 1985 was approximately $5 billion.

Mr. Chairman, you will see that AAN's recommendations reflect the nursery industry's careful study, and our requests reflect modest increases at best. We believe that the federal government's contribution to research is a reasonable expenditure of federal funds, particularly since nursery farmers neither ask for, nor receive, any crop subsidies or other federal support. AAN urges Congress to provide the critical funding as outlined herein.

We wish to thank Congress for recognizing the need to continue funding of the Cooperative State Research Service and its special research grants for pesticide clearance and pesticide impact assessment. The continued funding of the Interregional Project No. 4 has greatly assisted those efforts to obtain more prompt registrations for pesticides for nursery crops when such pesticides are already registered for use on food or feed crops. Cancellation of the IR–4 program, as the administration has proposed once again this year, will make it necessary for nurserymen to wait 6 to 10 years for needed pesticide registrations, if they are granted at all.

We strongly urge the Congress to provide $1.44 million to maintain the IR–4 pesticide clearance program. We also request $2.07 million for the pesticide impact assessment program.

We wish to thank Congress for its support of the Agricultural Research Service, particularly research programs on plant productivity affecting the nursery farming community. AAN urges that $450,000 be allocated within the proposed ARS plant productivity budget to assure that the nursery crops research programs are so strengthened and reinforced.

We also wish to thank the administration and Congress for their support of the U.S. National Arboretum. Last year's restoration of funds initially cut by the Gramm-Rudman-Hollings Act assures that program advances in recent years will not be lost.

AAN concurs with the recommendation of the Arboretum Advisory Council for the establishment of a germplasm repository for environmental plants. We urge this committee to allocate $200,000 for the establishment of this clonal repository.

The State Agricultural Experiment Station system continues to be most effective; however, it continues to be jeopardized by the erosion of its funding base, the Hatch Act formula funds. Although the proposed budget increase for fiscal year 1988 is appreciated, AAN supports an additional increase of 6.4 percent.

The Competitive Research Grants Program is also in need of increased funding. We support an additional increase of $5.5 million for plant science, reinstatement of $1.5 million for pest science, and an additional $10 million for biotechnology.

There is a continuing need for the Animal and Plant Health Inspection Service to be involved in gypsy moth quarantine activities, and to serve as an arbitrator in working out regulations between infested and noninfested states. AAN supports the proposed increase in funding for APHIS gypsy moth programs.

Since the 1979 cancellation of chlordate for nursery uses, a pesticide has not been available during the production cycle to enable nurserymen to meet Canadian requirements. The Agricultural Research Service has conducted considerable research to find a suitable replacement, but until such a pesticide is approved, American nurserymen are forced to resort to using exorbitantly expensive pesticides applied to individual plants in an impractical manner.

A multimillion-dollar market is being lost to American nurserymen because Canada is our principal foreign market. AAN thanks ARS and APHIS for their recent efforts to expedite protocol development. We urge APHIS in the strongest terms to move forward with its negotiations with Agriculture Canada to modify the Japanese beetle quarantine and to insure continued shipments of nursery stocks to Canada.

Due to imported fire ant quarantine regulations in the South, some nurserymen cannot ship their plants outside infested areas. We urge that the imported fire ant program be continued at funding levels originally proposed by APHIS for fiscal year 1988 and not eliminated. AAN believes that total elimination of the program will create a problem situation much like that with the Japanese beetle. We also urge APHIS to include nursery uses in the improved control and regulatory techniques program for imported fire ant.

The U.S. Extension Service and the agents in its employ are a logical point of dependability for those seeking information about producing a fairly complicated product. We, the nursery industry, are fortunate that they are there.

In addition, one of the main problems facing people in urban areas is the proper care of our industry's product so they may serve their function of enhancing the environment. AAN appreciates the proposed increase in Smith-Lever funding over last year, but we support an additional 1.6-percent increase. We also strongly urge restoration of the Smith-Lever Act 3(d) programs for pest management at $7.5 million and pesticide impact assessment at $1.7 million.

Mr. Chairman, as in years past, the American Association of Nurserymen truly appreciates the opportunity to present the views of the nursery industry with respect to agricultural research to you and your committee. We will be more than happy to answer any questions that you might have.

Thank you.

Senator BURDICK. We thank you and your association very much.

[The statement follows:]

STATEMENT OF BEN BOLUSKY

The American Association of Nurserymen welcomes this opportunity to present the views of the nursery industry with respect to the Fiscal Year 1988 budget for the U. S. Department of Agriculture.

The American Association of Nurserymen (AAN) is the national trade association of the nursery, landscape and garden center industry. We represent more than 3,500 firms across the country engaged in all aspects of the green plant industry — its grower, landscape and retail segments. By almost any standard, our members are primarily small family-owned farms and businesses. It is estimated that the retail value of nursery crops sold in the United States in 1985 was $5.4 billion.

The nursery industry is committed to a significant reduction in the federal deficit. Our members understand all too well what the budget deficit can do to our economy. Traditionally, the nursery industry has never looked to the government for handouts-and today is no exception. The nursery industry is prepared to make the necessary sacrifices to help achieve our nation's economic goals. As a result, we have painstakingly crafted our recommendations herein to balance our deep concern over the federal deficit with the critical need to maintain the integrity of research programs which are absolutely vital to the nursery industry. By the same token, AAN cannot and will not support the wholesale elimination of modest, yet crucial, programs simply because they represent dollar amounts easily "rounded out" of existence.

Mr. Chairman, you will see that AAN's recommendations reflect the nursery industry's careful study, and, our requests reflect modest increases at best. We believe that the federal government's contribution to research is a reasonable expenditure of federal funds, particularly since nursery farmers neither ask for, nor receive, any crop subsidies or other federal support. AAN urges Congress to provide the critical funding as outlined herein.

MINOR USE PESTICIDE PROGRAM

We wish to thank Congress for recognizing the need to continue funding the Cooperative State Research Service and its special research grants for Pesticide Clearance and Pesticide Impact Assessment. In so doing, Congress has continued to recognize the problems whereby producers of so-called "minor use" crops (such as those produced in nurseries) frequently find themselves without adequate pesticides to meet quarantine requirements or market demand for high quality plants. The continued funding of the Inter-Regional Project #4 (IR-4) has greatly assisted those efforts to obtain more prompt pesticide registrations for nursery crops when such pesticides are already registered for use on food or feed crops. Cancellation of the IR-4 program will make it necessary for nurserymen to wait six to ten years for needed pesticide registrations — if they are granted at all.

We strongly urge the Congress to provide $1.44 million to maintain the IR-4 pesticide clearance program. We also request $2.07 million for the Pesticide Impact Assessment program. This request is made with the hope that this Committee will explicitly call for a fair share of the funding to be employed for pesticide uses on environmental trees and plants.

AGRICULTURAL RESEARCH SERVICE

Once again this year, AAN wishes to thank both the Congress and the Administration for the continued and increasing support of programs of the Agricultural Research Service (ARS) - particularly its research programs on plant productivity affecting horticultural crops, including those produced by the nursery farming community. We wish to emphasize the need for an integrated, interdisciplinary approach to research involving products of the nursery trade — plants which improve and enhance the quality of man's environment. ARS needs to strengthen and reinforce existing nursery crops research programs, but not at the expense of traditional research positions. As a result, AAN urges that $450,000 be allocated within the proposed ARS plant productivity budget to assure that the nursery crops research programs are so strengthened and reinforced.

The American Association of Nurserymen also urges the ARS to continue pesticide tests on both field and container-grown nursery crops with a continued commitment to finding pesticides which would enable nursery farmers to meet quarantine requirements for Japanese beetle and other pests on nursery crop shipments to Canada. A multi-million dollar market is rapidly being lost since American nurserymen are unable to ship plants to Canada under existing quarantines.

The nursery industry has been and is increasingly concerned over the quality of this nation's precious surface and groundwater resources. The need for an accelerated research effort to alleviate surface and groundwater contamination, and the development of integrated systems for managing and conserving water, has never been greater and continues to increase. As a result, AAN strongly urges the Congress to consider consolidation of authority and funding for water quality and management research programs with one federal agency -- namely the Agricultural Research Service at the Department of Agriculture. Major research initiatives could focus on: (1) sources, prevention, and control of water pollution; (2) the fate of chemicals including persistence, mobility, transformation, and aggregation in the soil and water system; (3) treatment of contaminated soil and water to improve water quality; and, (4) risk assessment to address toxological, economic, social, legal, and political consequences of water quality and management programs.

U. S. National Arboretum

AAN also wishes to thank the Administration and Congress for their support of the U.S. National Arboretum's twin goals of improving society's awareness of the value and usefulness of environmental landscape plants coupled with a full program of research and exploration aimed at improving plants now in use and introducing new ones. Last year's restoration of funds initially cut by the Gramm-Rudman-Hollings Act in FY87 assures that program advances made in recent years will not be lost.

However, AAN feels that we must emphasize to ARS that it recognize the need for continued nursery crops research at the U. S. National Arboretum. As such, AAN concurs with the recommendation of the Arboretum Advisory Council for the establishment of a germplasm repository for environmental plants. We urge this Committee to allocate $200,000 for the establishment of this clonal repository.

The need remains for the National Arboretum to continue as a national center of excellence in education and research concerning environmental plants. However, the need for additional office and laboratory space for such research activities is even greater. Therefore, we strongly support movement of that portion of the Arboretum herbarium which does not directly relate to activities at the Arboretum. Moving such in combination with the installation of compactors for the remaining materials will provide valuable space that can be best utilized as research offices and laboratories. AAN also concurs with the recommendation of the National Arboretum Advisory Council that a means be found for restoring portions of the brickyard to be preserved and to demolish the remaining structures. Potential hazards and the unsightly appearance of the brickyard require an early resolution to this problem.

COOPERATIVE STATE RESEARCH SERVICE

The State Agricultural Experiment Station system is a successful blending of of local, state and federal interests, personnel, funding, program development and administration. It continues to be most effective. However, its effectiveness is jeopardized by the erosion of its funding base -- Hatch Act formula funds. Thus, although the proposed budget increase for FY88 is appreciated, AAN supports an additional increase of 6.4% to $165,545,000. We also urge the Directors of the State Agricultural Experiment Stations to fund fairly that research which is classified as "Research Program 3:15-Plants to Enhance the Environment".

The Competitive Research Grants program is also in need of increased funding. AAN supports an additional increase of $5.5 million for plant science, reinstatement of $1.5 million for pest science, and an additional $10 million for bio-technology. We would, however, ask this Committee to direct these grant administrators to include support for research on plants which enhance the environment.

An erosion of funding over the past few years has resulted in a critical need for two new national research programs. First is the need for $20 million to improve the scientific equipment of publicly supported agricultural research centers. We propose that fifty percent of these funds be made available equally to each state on a matching-fund basis, and the remaining 50% to be made on a competitive basis by peer review of proposals. Second is the need to improve research facilities in these same centers. Again, $20 million is needed and all such funds should be made available on a matching basis.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Gypsy Moth

Nursery plants are often regulated to protect other agricultural crops, (as well as forest and landscape plants about our homes, offices, parks and along our highways) from pests that are not serious pests of nursery crops. Gypsy moth is such a pest. As gypsy moth continues to spread into heretofore uninfested states, it is important that the Animal and Plant Health Inspection Service (APHIS) play a very strong role in preventing such spread. APHIS must continue its leadership role with the state Departments of Agriculture of those fortunate states which have not had to contend with this ravenous pest. There is a continuing need for APHIS to be involved in gypsy moth quarantine activities and to serve as an arbitrator in working out regulations between infested and noninfested states. AAN supports the proposed increase in funding for APHIS gypsy moth programs.

Japanese Beetle

While there are no funds designated for the Japanese beetle quarantine under the proposed FY88 budget for APHIS (just as there were none in 1985, 1986 and 1987), there remains a limited, yet significant, role for APHIS in coordinating information regarding the natural spread of the pest. APHIS also has the responsibility to certify nursery crops free of Japanese beetle in order to meet quarantine requirements for Canada, the principal foreign market for U. S. nursery plants. However, since the 1979 cancellation of chlordane for nursery uses, a pesticide has not been available during the production cycle to enable nurserymen to meet Canadian requirements. As mentioned previously, ARS has conducted considerable research to find a suitable replacement. But until a replacement pesticide is approved, American nurserymen are forced to resort to using exorbitantly expensive pesticides applied to individual plants in an impractical manner. This is not without serious applicator and environmental hazards. AAN thanks ARS/APHIS for their recent efforts to expedite protocol development. AAN urges APHIS in the strongest terms to move forward with its negotiations with Agriculture Canada to modify the Japanese beetle quarantine and to insure continued shipments of nursery stock to Canada.

Imported Fire Ant

Due to imported fire ant quarantine regulations in the South, some nurserymen cannot ship their plants outside infested areas. AAN urges that the Imported Fire Ant Program be continued at funding levels orginally proposed by APHIS for FY87 and not eliminated. AAN believes that total elimination of the program will create a problem situation much like that with Japanese beetle. AAN also urges APHIS to include nursery uses in the improved control and regulatory techniques program for Imported Fire Ant.

Agricultural Inspection

It is the objective of APHIS to protect the nation's animal and plant resources from artificial introduction and spread of hazardous insects and diseases. Therefore, Congress, the Administration and citizens of the United States should look upon the role of APHIS as preventative in purpose. APHIS is to be sincerely congratulated on its success in preventing the artificial introduction into this country of many of the world's most destructive plant insects and diseases. Despite tight budgets, APHIS continues to be very innovative in either eradicating those few new introductions of plant pests that slip in or successfully retarding the spread of new pests until acceptable means of controlling them economically have been determined. AAN strongly supports the proposed increased appropriations for inspection programs.

The American Association of Nurserymen further endorses the proposed APHIS FY88 budget for increased activities with witchweed and golden nematode. In the interest of supporting American agriculture, we strongly believe, that as fewer and fewer pesticides are available for quarantine purposes, it is even more vital that APHIS' role be maintained.

EXTENSION SERVICE

The United States Extension Service and the agents in its employ are a logical point of dependability for those seeking information about producing a fairly complicated product.

We in the nursery industry are fortunate that they are there. In addition, one of the main problems facing people in urban areas is the proper care of our industry's product so they may serve their function of enchancing the environment. We therefore very much need the extention agent's help in relating information about our product to the consumer. AAN appreciates the proposed increase in Smith-Lever funding over last year, but we support an additional 1.6% increase to $241,484,000. AAN also strongly urges restoration of the Smith-Lever Act 3(d) programs for Pest Management at $7.5 million and Pesticide Impact Assessment at $1.7 million.

Mr. Chairman, as in years past, the American Association of Nurserymen truly appreciates the opportunity to present the views of the nursery industry with respect to agricultural research to you and your Committee. Thank you.

CONGRESSIONAL WITNESS

STATEMENT OF HON. STEVEN D. SYMMS, U.S. SENATOR FROM IDAHO

ACCOMPANIED BY TRENT CLARK, AGRICULTURAL ASSISTANT

Senator BURDICK. The next witness is the Honorable Steven D. Symms, U.S. Senator from Idaho.

Senator SYMMS. Thank you very much, Mr. Chairman.

I have with me my agricultural assistant, Mr. Trent Clark. I appreciate your indulgence to have me come before this subcommittee, which you chair.

I am also pleased with the work that we did in the Environment and Public Works Committee last week, which is also beneficial to rural America and agriculture in general, and that is to fix the roads so that products can be hauled to the cities where people consume them.

Mr. Chairman, and our colleagues, I welcome this opportunity to let you know my hopes and suggestions for the federal government's investment in agriculture in fiscal year 1988.

I would like to call to your attention a study by Gerald Schluter and William Edmunson of the Economic Research Service on the importance of agriculture to the economies of the various states. This study determined the percentage of jobs in each state that directly relate to food and fiber production, processing, and marketing. It ranks the states by the proportion of those jobs representing on-farm workers.

According to the study, the 10 most agriculturally dependent states are: South Dakota, with almost 31 percent, or 98,000 jobs; North Dakota, with almost 31 percent, and 90,000 jobs; Iowa, with 27 percent, and 381,000 jobs; Idaho, with 27 percent, and 107,000 jobs; Montana, with 23 percent, and 82,418 jobs; Kansas, with 24 percent, and almost

277,000 jobs; Nebraska, with almost 27 percent, and almost 200,000 jobs; Minnesota, with 23 percent, and almost 500,000 jobs; Wisconsin, with almost 24 percent, and over 500,000 jobs; and Oklahoma, with 21 percent, and almost 300,000 jobs.

I will submit all of those numbers for the record, but the point is, Mr. Chairman, you and I have states where a significant employment factor is agriculture. It is a very significant part of our commerce. In states such as these, government farm policy, and the investment of tax dollars to carry out that policy, has a tremendous impact.

So I don't envy the subcommittee's task of determining where our tax dollars are best spent. I would give you a few suggestions, and then offer myself to work with you in any way that I can be helpful to contribute to better economies in rural areas of this country.

As a member of the Budget Committee, I am well aware of the overriding need for fiscal responsibility. That responsibility can only be met by controlling government spending. Mr. Chairman, it is my view that the American people are not undertaxed, but the federal budget is overspent. In our search for budgetary savings, even agriculture must tighten its fiscal belt.

There are those who will claim that American agriculture cannot support further reductions in funding. But, as supportive of agriculture as I am, I think there may be areas where we could reduce spending with respect to agriculture.

Federal spending for agriculture is today more than it has ever been in the history of this nation, and yet the financial status of farmers has not increased proportionately. Farmers in Idaho, as well as those in your own home state, are concerned that much of the agriculture budget may be consumed by a top heavy bureaucracy.

An alarming trend has appeared in the Department's budget. A brief overview of 1988's proposed funding levels for departmental agencies shows, Mr. Chairman, that they are cutting the people who do the work, and adding the lawyers at the top to be administrators.

Science and education is down almost 1 percent. International and commodity programs are down almost 11 percent. Natural resources and environment is down almost 24 percent. Food and consumer services are down almost 4 percent. Marketing and inspection are down almost 62 percent. Administration is up by almost 22 percent.

Mr. Chairman, during my 14 years as an elected Representative, Idaho farmers have urged my support for many different programs within the Department of Agriculture. As of yet, none of these farmers have expressed any need for more administration, and in this case, we would just be spending more to administer less.

What they tell me is that we need people out along the banks of the Snake to help the farmers with their real problems. We don't need more people along the banks of the Potomac to stir up more problems for them.

It doesn't make any sense, what is happening in this budget request. Any private business that operated in a situation where it cut out the people at the bottom, and added to the top, wouldn't make it through its first fiscal year.

Mr. Chairman, this trend is also visible in the proposed staffing for the Department: The function of science and education, we see down by 21; international and commodity programs, down 119; natural resources and the environment, down 5,140; small community and rural development, 1,685; marketing and inspection, down 315; and yet the administration is up by 54.

When you look at who these people are, the 271 field workers in the Animal and Plant Health Inspection Service, and 975 in the local Farmers Home Administration positions that are being proposed for elimination, these are the people who actually process the loans, and so forth, that our farmers are complaining that they can't get processed. Then the Department's legal services, Offices of the Inspector General and General Counsel, are slated to gain 52 new full time employees, more lawyers, I might say.

I challenge this subcommittee to find one farmer, just one, who thinks that the Department of Agriculture has too many people out in the field, but not enough lawyers in Washington, DC.

Consequently, I strongly encourage the subcommittee to freeze administration and personnel, increasing those accounts only proportionate to an increase in other agency budgets. By the same token, decreases in departmental functions should be accompanied by corresponding reductions in administration and legal services.

One of the most important tools in obtaining budgetary savings is to allocate dollars to only those areas where they can do the most good.

This year, politicians are making much ado about the position of the United States in international trade. Competitiveness has become a buzz-word of the Congress. Unfortunately, as all too often in Washington, DC, I fear this vital issue is long overdue for such national attention.

In our efforts to be a competitive agricultural nation, tax dollars devoted to supply control and production management programs have been extremely counterproductive. I realize, however, that the course of such programs is set during authorization of the farm bill, and that this committee has little control over such expenditures. However, I believe that the subcommittee can ensure that the problems currently facing our commodity programs are not transmitted to other sectors of agriculture. Let me give you an example, Mr. Chairman.

Nonedible rapeseed, a crop that is grown in my state, one of the best known sources of erucic acid, is currently a widely used and nonsubsidized rotation crop in Idaho. Erucic acid is a critical material with limited industrial application. The 15,000 acres of industrial rapeseed already planted will easily satisfy the market and the nation's needs.

The departmental programs and grants that encourage and subsidize the expansion of erucic acid crops can only result in overproduction and surplus. I urge the subcommittee to closely scrutinize programs such as the competitive grants awarded through the Office of Critical Materials.

Rapeseed and crambe acreage expansion should not be funded through that office to increase supplies of them. Promoting additional uses of erucic acid, improving crop productivity, or expanding domestic and foreign markets is the way, in my view, that we should spend those dollars. So I hope that the chairman and the committee will be able to put some guidance on how those dollars are spent, so that we don't go out and encourage a lot of production which is not needed.

Of all of the Department's activities, its agricultural research programs are by far the most efficient uses of taxpayer money. It has been the innovation and technological excellence of American agriculture that have made this nation a major agricultural exporter.

I have often said, Mr. Chairman, that if the Soviet Union ever allowed the Soviet farmers their land, instead of the Soviet bureaucrats, we would have real competition in agriculture. I think that we have a system that has worked out, and our agricultural research has been very beneficial to the institution of agriculture as a whole.

As we seek to regain our competitiveness on world markets, our emphasis on scientific and technological development must remain firm. We need to continue agricultural research dollars because they do yield a benefit to farmers estimated at seven times that of direct subsidies. That fact cannot be ignored as we establish our funding priorities.

Mr. Chairman, I have another suggestion that I would like to make, and that is for the Cool Season Legume Research Institute. Two years ago, Mr. Harold Blain, the executive vice president of the American Dry Pea and Lentil Association, who lives in Moscow, ID, related to me his experience with an agricultural research program that failed. He had just returned from an attempted visit to ICARDA, a legume research center funded in part by U.S. foreign assistance dollars.

Note that I said, attempted to visit. You see, ICARDA is located in Aleppo, Syria, and Mr. Blain was not permitted to enter the country. Can you imagine how frustrated he was, knowing that his own tax dollars support a research effort that assisted his competition, but denied the same benefits to him?

In order to reconcile this tremendous inequity, I urge the subcommittee to include in its appropriations a proposal for the establishment of an International Cool Season Legume Research Institute as an alternative to ICARDA. An executive summary of that proposal is included with my written statement, and I ask that it be included as part of this hearing record.

Senator Burdick. Without objection, so ordered.

Senator Symms. The institute would conduct international legume research here in the United States. The benefits of the program would be readily available to our own domestic farmers, but would also be open to agriculturalists from foreign countries, if that would be their choice.

Since the program would maintain a strong emphasis on food and nutritional needs in foreign countries, it is only appropriate that it be funded, at least in part, from the foreign assistance budget. I will be bringing this proposal to the attention of the subcommittee chairman with jurisdiction in that area, Mr. Inouye. I strongly urge this subcommittee's cooperation on the proposal.

Mr. Chairman, in many states in the West, we have large blocks of federal ownership, and I would like to propose one area in which taxpayer funds might be better applied, and that is in developing a better understanding of the economic impacts of government ownership patterns of management in the West.

Most people in this country are not aware of the fact that the only other government in the world that has control of so much land as does the United States government is the Soviet Union. Land use policy determines Soviet mineral, timber, and agricultural production.

It is a mistake to think our own land management does not affect American basic resource industries. And yet, how much do we know about the economic impact of our policies? Very little, I would say, Mr. Chairman. In my part of the country, the Pacific Northwest, we have the largest supplies of softwood timber of anywhere in the world, and certainly in the United States.

Most of our softwood timber is in the West, and most of it is owned by the federal government. It is harvested, managed, and processed by a private enterprise group processing industry, who are forced to bid against each other, against the government monopoly, which controls timber, and offers bits and pieces of it from time to time, and oftentimes forces these producers to be out of competition with the market. This is what brought about the whole confrontation between the Canadians and the United States earlier this year.

I would ask unanimous consent that a summary of the proposal be included in the hearing record at this point.

Senator BURDICK. Without objection, so ordered.

[The information follows:]

ECONOMIC IMPACTS OF PUBLIC LAND MANAGEMENT ON RESOURCE-BASED ECONOMIES IN THE WESTERN STATES

Public lands have many beneficial uses including timber and energy production, outdoor recreation, grazing, wildlife habitat, and military activities. In addition, public land provides a major source of water for irrigated agriculture, transportation, fish habitat, and municipal, commercial and industrial activities. Communities in Idaho and other western states are highly impacted by public land management policies because much of their tax revenue, income and employment is derived from land intensive activities such as agriculture and timber production, mining, outdoor recreation and tourism. While depressed markets for agricultural, timber and mineral products have reduced income and employment in resource-dependent industries, there is growing concern that current land management policies limit the availability and/or are increasing the private cost of using publicly-controlled natural resources and constrain economic growth and development in resource-dependent communities.

Compared to other regions of the United States, the Western Region has the highest proportion of its land under federal ownership and management. Federal ownership of land in the Western Region ranges from 30 percent in Montana to 87 percent in Nevada, with Utah and Idaho having 66 percent and 64 percent, respectively, of their land in federal ownership and managed by federal agencies. Federal land ownership in other states of the union range from 0 percent in Maine and Connecticut to a maximum of 12 percent in New Hampshire (Figure 1). Land and land resources are basic to the economic development of rural areas. Given that a high proportion of land in the western states is owned by the federal government, the policies adopted by federal agencies in the management and utilization of land resources will affect the growth and development of states and local communities. The higher the proportion of land ownership by the federal government, the more significant the impact of public land management policy on the economic growth and development of the states and local communities.

Public land ownership and management in the Western Region have been a subject of debate since the early 19th century. The questions often asked and debated are: (1) To what extent are the western states dependent on public land for their growth and development? (2) Is the present public land ownership and management policy a constraint to rural economic in the Western Region? (3) Does the present public land ownership and management policy adversely affect the economic growth and development of the western states? (4) What are the impacts of present public land ownership and management policy on the efficient utilization of natural resources? (5) What impact will the present public land ownership and management policy have on the economic growth and development of local communities? (6) What impact does the present public land ownership and management policy have on tax revenues, employment and income in local communities in the western states? (7) What impact does the present public land ownership and management policy have on different industries? (8) How does the

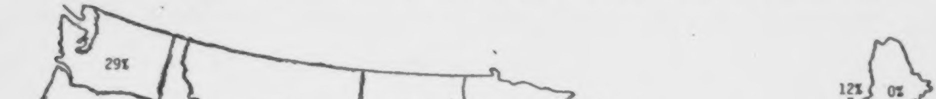


Figure 1. The distribution of federal land ownership in the United States.

present public land ownership and management policy affect the economic viability and competitiveness of different sized firms? (9) Does the present policy adversely affect small-sized locally-based firms in favor of larger sized firms? and (10) Does the present federal ownership and management policy for public land restrict the flexibility of various sized firms to adjust to changing market conditions?

Currently, adequate answers to the above questions are not available. Research conducted by an independent agency is needed to address the above questions simultaneously to provide accurate and scientific data on the role of public land ownership in the economic development of states and local communities in the Western Region.

The Idaho economy, as well as the economies of other Western States, is dominated by its natural resource-based industries including forest products, agriculture, mining and recreation. Each of these sectors of the economy is heavily dependent on natural resources located on public lands. The combination of recession and high interest rates since 1980 has resulted in reduced income and employment in resource-based industries. Since interest rates have fallen, other parts of the country have recovered from the recession which is evident from higher incomes and reduced unemployment. However, Idaho and other Western States having a high proportion of their land under federal control have not experienced the economic recovery which has occurred in other parts of the country. This situation raises the question of whether or not public ownership of natural resources has worked to deter economic development in Idaho.

For these reasons a study is needed to determine whether or not public ownership of land tends to constrain or even prevent economic development. In other words, would changes in land management policies stimulate private sector investments and result in greater employment and income? Many rural areas of Idaho have lost employment and population to the extent that the local communities are no longer economically viable. Schools and rural services must be subsidized in order to exist. At the present time, much of rural Idaho still suffers from recession while other parts of the United States enjoy growth and prosperity.

Federal land management polices impact resource-based communities and industries. For example, the allowable cut on a forest or the number of cattle that can be grazed on rangeland affect economic activity in many areas of the west. These policies can impact market conditions and the adoption of production technologies which in turn influence the economic well-being of people in the local community.

Government programs and policies may influence the business community when they shift economic supply or demand conditions. For example, the higher interest rates of the early 1980's reduced the demand for housing and the derived demand for lumber and wood products. The impact of this policy brought severe and abrupt changes to many western rural communities. Many small, less efficient, wood processing facilities could no longer compete and were forced out of business. So were many larger but older and consequently less efficient sawmills. The result was a loss of employment, income, tax revenues and ultimately the population from rural communities. In a few months many of these rural communities faced major structural changes. In the meantime, wood production shifted to larger, more efficient mills in larger cities.

Higher interest rates negatively impacted the agricultural and mining sectors. Since 1985, interest rates have declined to lower long term levels and many industries have returned to more normal levels of operation. The smaller rural communities that lost population and saw their industries move away or close down completely have not rebounded.

This situation raises the question of whether or not federal land management policies in the West actually discourage resource use and development.

Such land management policies can also affect market conditions and the level of technology applied in small rural communities. For these reasons, it is desirable to assess the role of federal land management policies in terms of their impacts on the economic well-being of small western rural communities.

The extent to which current public policies limit the beneficial uses of natural resources managed by federal agencies and the economic welfare of resource-dependent communities is not known. A comprehensive study is needed to determine whether current public policies facilitate or constrain the efficient use of publicly-controlled natural resources by agricultural, mining and forest products industries and how these policies affect the ability of these industries to compete in domestic and international markets. To ensure a balanced evaluation, competition between recreational and environmental uses of public lands versus agricultural, mining and timber uses will be considered. The primary and secondary impacts of current land management policies on the tax revenue, income and employment in selected resource-dependent communities in the West will be analyzed. If current policies are found to constrain beneficial uses of public land and economic growth in resource-dependent communities, then it is important to identify and investigate alternative policies for removing these constraints.

The importance of publicly-controlled natural resources (timber, grazing land, mineral resources, wildlife, water, etc.) to the economic viability of local communities in a natural resource-based economy need to be evaluated (see Appendix for discussion of issues in federal timber management). A complete evaluation of the economic impact of publicly-controlled natural resources on the viability of rural communities will require the development of regional accounts. This will involve identifying and describing the type of economic activities that take place in each local community; determine the relative size of these activities; determine how payments to labor, land and government vary for a given industry; and a description of the imports and exports of each community. In addition to the development of regional accounts, the evaluation of the impact of publicly-controlled natural resources on the economic viability of local communities will also require the estimation of a set of multipliers of total business output, personal income, total income, value added, and employment. Constraints imposed by public policy on production in certain industrial sectors will also need to be analyzed and its economic consequences on local communities needs to be determined.

Rural resource-based communities in the western U.S. have not prospered as much as other regions in the United States and experienced difficulties to adjust to changing national economic conditions. Because of this situation, questions are being raised about the effect of public land ownership and public policies that impact resource use in these communities and whether or not federal control is retarding the economic growth of these rural communities. Some observers feel that privately held lands are better managed and are therefore more productive than government lands. Whether or not this is true may well influence the economic well-being of rural communities in terms of income and employment. Since privately owned and federally held lands in the West may be managed very differently, it is important in terms of future policies to evaluate the advantages and disadvantages of each type of ownership. For example, in many states private grazing, forest, recreation, and mining lands exist side by side with lands that are held by the federal government. A comparison of short and long term management policies and productivities from both types of ownership is necessary in order to evaluate if either is superior to the other in terms of short term economic adjustments and longer run productivity. Since so much land in the West is federally held, and so little in the East, the West is a logical place to study the impacts of federal versus private ownership for similar qualities of land in terms of both short run and long run productivity.

In general, public land ownership and management policy developed and implemented by federal agencies have affected and will continue to affect the economic welfare of those states where significant portions of their land resources are owned and managed by the federal government. State and local economic welfare and interests may not coincide with national interests. Thus, states that have high proportions of their land resources under federal control may have sacrificed income, employment, economic growth and general services to their residents in order to satisfy national interests legislated by Congress and implemented by federal agencies. Given the present economic dilemmas facing states like Idaho where over 64 percent of its land resources are owned and managed by the federal government, a comprehensive economic study is needed to provide Congress with accurate data on the role public land plays in the economic well-being of the Western States. Such a study will provide alternative management policy to protect states' interests and enhance their economic growth and development.

The proposed study will have the overall objective of assessing the economic dependence of state and local economies in the Western States on publicly-controlled lands and natural resources and to evaluate the impacts of current and alternative public land management policies on the economic viability of these economies. Specific objectives are as follows:

1. To determine the economic importance of publicly-controlled natural resources (timber, grazing land, mineral resources, wildlife, water, etc.) to selected local natural resource-based economies in the West.

2. To evaluate the extent to which current public policies limit the beneficial uses of publicly-controlled natural resources by private industries and the public, and inhibit economic growth and development (tax revenues, income, employment, etc.) in selected natural resource-based communities in the West.

3. To identify and evaluate alternative public land management policies for enhancing the revenue, employment, income, and overall economic viability of selected resource-dependent communities in the West.

4. To assess the relative importance of current land management policies, market conditions and technologies on the economic viability of selected resource-based communities in the West.

5. To analyze the extent to which current public land management policy constrains the operation and profitability of different sized firms.

6. To compare economic productivity from federal lands under current ownership with that possible from private ownership in both the short term and the longer run. This will be done for forest, grazing, mining and recreational lands.

Senator SYMMS. This is why I have asked for this research proposal, to answer those critical questions about federal lands and the way they affect our economy. Dr. Hanke from Johns Hopkins University, and Dr. Dowdle from the University of Washington, and Dr. Araji from the University of Idaho's Agricultural Economics Department, have consulted one another. Dr. Araji has written this proposal from the Agricultural Economics Department of the University of Idaho.

Those are the kinds of people who could give us a fair credible study, which would be very helpful to not only the committee, but to the states of Idaho, Oregon, Washington, North Dakota, and other states that have been held hostage to federal ownership patterns for so many years.

Idaho, the nation's fourth most agriculturally dependent state, has more acres of statutory federal wilderness area than it does irrigated farmland. You can imagine what sort of impact that has on Idaho's economy!

Our nation's wealth comes out of a hole in the ground. Without the production from the ground, the trees, the farms, the fish, and the minerals, we would not have anything that has made our industrial nation as strong as it is.

If we, as a nation, are to compete on the world market, we must understand the economic consequences of our natural resource policies.

In conclusion, Mr. Chairman, I thank you for the opportunity to be here. As I said before, I don't envy your responsibility to chart a sound fiscal plan for the nation's commitment to agriculture. I appreciate, however, the opportunity to share some hopes and suggestions for a better investment in our nation's first and oldest, and one of the proudest industries that needs help at this time.

Thank you very much, Mr. Chairman. I would like to say that I will be at your service to do what I can to help make the active investment that we will be making this year a sound one for not only the taxpayers, but for the nation as a whole.

Senator BURDICK. Thank you very much for your contribution.

Senator SYMMS. Thank you very much.

[The statement follows:]

Statement of Senator Symms

MR. CHAIRMAN, DISTINGUISHED COLLEAGUES, I WELCOME THIS OPPORTUNITY TO LET YOU KNOW THIS SENATOR'S HOPES AND SUGGESTIONS FOR THE FEDERAL GOVERNMENT'S INVESTMENT IN AGRICULTURE IN 1988.

I'D LIKE TO CALL YOUR ATTENTION TO A STUDY BY GERALD SCHLUTER AND WILLIAM EDMONDSON OF THE ECONOMIC RESEARCH SERVICE ON THE IMPORTANCE OF AGRICULTURE TO THE ECONOMIES OF THE VARIOUS STATES. THIS STUDY DETERMINED THE PERCENTAGE OF JOBS IN EACH STATE THAT DIRECTLY RELATE TO FOOD AND FIBER PRODUCTION, PROCESSING, AND MARKETING. IT THEN RANKS THE STATES BY THE PROPORTION OF THOSE JOBS REPRESENTING ON-FARM WORKERS. ACCORDING TO THE STUDY, THE TEN MOST AGRICULTURALLY-DEPENDENT STATES ARE:

RANK	STATE	FOOD & FIBER AS % OF TOTAL JOBS	# OF FOOD AND FIBER JOBS
1.	SOUTH DAKOTA	30.8	98,219
2.	NORTH DAKOTA	30.6	90,282
3.	IOWA	27.1	381,000
4.	IDAHO	27.1	107,230
5.	MONTANA	23.0	82,418
6.	KANSAS	24.2	276,740
7.	NEBRASKA	26.8	199,720
8.	MINNESOTA	23.5	478,450
9.	WISCONSIN	23.8	522,360
10.	OKLAHOMA	21.4	298,750

IN STATES SUCH AS THESE, GOVERNMENT FARM POLICY AND THE INVESTMENT OF TAX DOLLARS TO CARRY OUT THAT POLICY HAS TREMENDOUS IMPACT. I DO NOT ENVY THIS SUBCOMMITTEE'S ENORMOUS TASK OF DETERMINING WHERE OUR TAX DOLLARS ARE BEST SPENT. I CAN, HOWEVER, PROVIDE SOME SUGGESTIONS.

AS A MEMBER OF THE SENATE BUDGET COMMITTEE, I AM WELL AWARE OF THE OVERRIDING NEED FOR FISCAL RESPONSIBILITY. THAT RESPONSIBILITY CAN ONLY BE MET BY CONTROLLING GOVERNMENT SPENDING. THE AMERICAN PEOPLE ARE NOT UNDER-TAXED, THE FEDERAL BUDGET IS OVERSPENT. IN OUR SEARCH FOR BUDGETARY SAVINGS, EVEN AGRICULTURE MUST TIGHTEN ITS FISCAL BELT.

THERE ARE THOSE WHO CLAIM THAT AMERICAN AGRICULTURE CANNOT SUPPORT FURTHER REDUCTIONS IN FUNDING. AS SUPPORTIVE OF AGRICULTURE AS I AM, I CANNOT AGREE. FEDERAL SPENDING FOR AGRICULTURE IS TODAY MORE THAN IT HAS EVER BEEN IN THE HISTORY OF THIS NATION, AND YET THE FINANCIAL STATUS OF FARMERS HAS NOT INCREASED PROPORTIONATELY. FARMERS IN IDAHO, AS WELL AS THOSE IN YOUR OWN HOME STATE, ARE CONCERNED THAT MUCH OF THE AGRICULTURE BUDGET MAY BE CONSUMED BY A TOP HEAVY BUREAUCRACY.

ADMINISTRATIVE COSTS

AN ALARMING TREND HAS APPEARED IN THE DEPARTMENT'S BUDGET. A BRIEF REVIEW OF 1988'S PROPOSED FUNDING LEVELS FOR DEPARTMENTAL AGENCIES SHOWS THE FOLLOWING TREND:

FUNCTION	PROPOSED FUNDING	
SCIENCE AND EDUCATION	DOWN	.8%
INTERNATIONAL AND COMMODITY PROGRAMS	DOWN	10.7%
NATURAL RESOURCES AND ENVIRON.	DOWN	23.8%
FOOD AND CONSUMER SERVICES	DOWN	3.8%
MARKETING AND INSPECTION	DOWN	61.7%
ADMINISTRATION	UP	21.6%

DURING MY FOURTEEN YEARS AS AN ELECTED REPRESENTATIVE, IDAHO FARMERS HAVE URGED MY SUPPORT FOR MANY DIFFERENT PROGRAMS WITHIN THE DEPARTMENT OF AGRICULTURE. AS OF YET, NONE OF THEM HAS EXPRESSED THE URGENT NEED FOR MORE "ADMINISTRATION." AND IN THIS CASE, WE WOULD BE SPENDING MORE TO ADMINISTER LESS. IT JUST DOESN'T MAKE SENSE. ANY PRIVATE BUSINESS THAT OPERATED THAT WAY WOULDN'T MAKE IT THROUGH ITS FIRST FISCAL YEAR.

THIS SAME TREND APPEARS IN THE DEPARTMENT'S PERSONNEL PROPOSALS. LOOK AT NEXT YEAR'S PROPOSED STAFFING:

FUNCTION	PROPOSED STAFF YEARS
SCIENCE AND EDUCATION	- 21
INTERNATIONAL AND COMMODITY PROGRAMS	- 119
NATURAL RESOURCES AND ENVIRON.	- 5,140
SMALL COMMUNITY AND RURAL DEVELOPMENT	- 1,685
MARKETING AND INSPECTION	- 315
ADMINISTRATION	+ 54

I AM EVEN MORE STARTLED WHEN I LOOK AT PROPOSED PERSONNEL LEVELS ON AN AGENCY-BY-AGENCY BASIS. WHILE 271 FIELD WORKERS IN THE ANIMAL AND PLANT HEALTH INSPECTION SERVICE AND 975 LOCAL FARMERS HOME ADMINISTRATION POSITIONS ARE BEING PROPOSED FOR ELIMINATION, THE DEPARTMENT'S LEGAL SERVICES, OFFICES OF INSPECTOR GENERAL AND GENERAL COUNSEL, ARE SLATED TO GAIN 52 NEW FULL TIME EMPLOYEES.

I CHALLENGE THIS SUBCOMMITTEE TO FIND ONE FARMER, JUST ONE, WHO FEELS THAT THE DEPARTMENT OF AGRICULTURE HAS TOO MANY PEOPLE OUT IN THE FIELD, BUT NOT ENOUGH LAWYERS IN WASHINGTON.

CONSEQUENTLY, I STRONGLY ENCOURAGE THE SUBCOMMITTEE TO FREEZE ADMINISTRATION AND PERSONNEL, INCREASING THOSE ACCOUNTS ONLY PROPORTIONATE TO AN INCREASE IN OTHER AGENCY BUDGETS. BY THE SAME TOKEN, DECREASES IN DEPARTMENTAL FUNCTIONS SHOULD BE

ACCOMPANIED BY CORRESPONDING REDUCTIONS IN ADMINISTRATION AND LEGAL SERVICES.

ONE OF THE MOST IMPORTANT TOOLS FOR OBTAINING BUDGETARY SAVINGS IS TO ALLOCATE DOLLARS TO ONLY THOSE AREAS WHERE THEY CAN DO THE MOST GOOD.

THIS YEAR, POLITICIANS ARE MAKING MUCH ADO ABOUT THE POSITION OF THE UNITED STATES IN INTERNATIONAL TRADE. "COMPETITIVENESS" HAS BECOME THE BUZZ-WORD OF THIS CONGRESS. UNFORTUNATELY, AS IS USUAL WITH WASHINGTON, D.C., I FEAR THIS VITAL ISSUE IS LONG OVERDUE FOR SUCH NATIONAL ATTENTION.

IN OUR EFFORT TO BE A COMPETITIVE AGRICULTURAL NATION, TAX DOLLARS DEVOTED TO SUPPLY CONTROL AND PRODUCTION MANAGEMENT PROGRAMS HAVE BEEN EXTREMELY COUNTERPRODUCTIVE. I REALIZE, HOWEVER, THAT THE COURSE OF SUCH PROGRAMS ARE SET DURING AUTHORIZATION OF THE FARM BILL, AND THAT THIS COMMITTEE HAS LITTLE CONTROL OVER SUCH EXPENDITURES.

AVOIDING OVERPRODUCTION

THIS SUBCOMMITTEE CAN, HOWEVER, ENSURE THAT THE PROBLEMS CURRENTLY FACING OUR COMMODITY PROGRAM CROPS ARE NOT TRANSMITTED TO OTHER SECTORS OF AGRICULTURE. LET ME GIVE YOU AN EXAMPLE.

NON-EDIBLE RAPESEED, ONE OF THE BEST KNOW SOURCES OF ERUCIC ACID, IS CURRENTLY A WIDELY-USED AND NON-SUBSIDIZED ROTATION CROP IN IDAHO. ERUCIC ACID IS A CRITICAL MATERIAL WITH LIMITED INDUSTRIAL APPLICATION. THE 15,000 ACRES OF INDUSTRIAL RAPESEED ALREADY PLANTED WILL EASILY SATISFY THE NATION'S NEEDS.

DEPARTMENTAL PROGRAMS AND GRANTS THAT ENCOURAGE AND SUBSIDIZE THE EXPANSION OF ERUCIC ACID CROPS CAN ONLY RESULT IN OVERPRODUCTION AND SURPLUS. I URGE THE SUBCOMMITTEE TO CLOSELY SCRUTINIZE PROGRAMS SUCH AS THE COMPETITIVE GRANTS AWARDED THROUGH THE OFFICE OF CRITICAL MATERIALS. RAPESEED AND CRAMBE ACREAGE EXPANSION SHOULD NOT BE THE FUNDED THROUGH THAT OFFICE. PROMOTING ADDITIONAL USES OF ERUCIC ACID, IMPROVING CROP PRODUCTIVITY, OR EXPANDING DOMESTIC AND FOREIGN MARKETS WOULD BE A MUCH BETTER USE OF TAXPAYER DOLLARS.

AGRICULTURAL RESEARCH

OF ALL OF THE DEPARTMENT'S ACTIVITIES, IT'S AGRICULTURAL RESEARCH PROGRAMS ARE BY FAR THE MOST EFFICIENT USES OF TAXPAYER MONEY. IT HAS BEEN THE INNOVATION AND TECHNOLOGICAL EXCELLENCE OF AMERICAN AGRICULTURE THAT HAS MADE THIS NATION A MAJOR AGRICULTURAL EXPORTER. AS WE SEEK TO REGAIN OUR COMPETITIVENESS ON WORLD MARKETS, OUR EMPHASIS ON SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENT MUST REMAIN FIRM.

Agricultural research dollars benefit the farmer an estimated seven times what direct subsidies do. That fact cannot be ignored as we establish our funding priorities.

COOL SEASON LEGUME RESEARCH INSTITUTE

A couple of years ago, Mr. Harold Blain, Executive Vice President of the American Dry Pea and Lentil Association, related to me his experience with an agricultural research program that failed. He had just returned from an attempted visit to ICARDA, a legume research center funded in part by U.S. foreign assistance dollars.

Note I said, "attempted" to visit. You see, ICARDA is located in Aleppo, Syria, and Mr. Blaine was not permitted to enter the country. Can you imagine how frustrated he was, knowing that his own tax dollars supported a research effort that assisted his competition, but denied the same benefits to him?

In order to reconcile this tremendous inequity, I urge the subcommittee to include in its appropriations a proposal for establishment of an International Cool Season Legume Research Institute. An executive summary of that proposal is included with my written statement, and I ask that it be included as part of this hearing record.

The Institute would conduct international legume research here in the United States. The benefits of the program would be readily available to our own domestic farmers, but would also be open to agriculturalists from foreign countries. Since the program would maintain a strong emphasis on meeting nutritional needs in foreign countries, it is only appropriate that it be funded, at least in part, from the foreign assistance budget. I will be bringing this proposal to the attention of the Subcommittee Chairman with jurisdiction in that area, Mr. Inouye. I strongly urge this Subcommittee's cooperation on the proposal.

PUBLIC LANDS STUDY

I'd like to propose one more area in which taxpayer funds could be better applied, and that is in developing a better understanding of the economic impacts of public land management.

Did you know that the only other government in the world to control as much land as does the United States is the Soviet Union? Land use policy determines Soviet mineral, timber, and agricultural production. It's a mistake to think our own land management does not affect American basic resource industries. And yet, how much do we know about the economic impact of our policies? Very little, Mr. Chairman.

THAT IS WHY I HAVE ASKED FOR A RESEARCH PROPOSAL TO ANSWER CRITICAL QUESTIONS ABOUT FEDERAL LANDS AND THE WAY THEY EFFECT OUR ECONOMY. I ASK THAT A SUMMARY OF THAT PROPOSAL BE INCLUDED IN THE HEARING RECORD.

IDAHO, THE NATION'S FOURTH MOST AGRICULTURALLY DEPENDENT STATE, HAS MORE ACRES OF STATUTORY FEDERAL WILDERNESS AREA THAN IT DOES IRRIGATED FARM LAND. CAN YOU IMAGINE WHAT SORT OF IMPACT THAT HAS ON IDAHO'S ECONOMY? OUR NATION'S WEALTH COMES OUT OF A HOLE IN THE GROUND. IF WE, AS A NATION, ARE TO COMPETE ON THE WORLD MARKET, WE MUST UNDERSTAND THE ECONOMIC CONSEQUENCES OF OUR NATIONAL RESOURCE POLICIES.

CONCLUSION

AS I SAID BEFORE, I DO NOT ENVY YOUR RESPONSIBILITY TO CHART A SOUND FISCAL PLAN FOR OUR NATION'S COMMITTMENT TO AGRICULTURE. I APPRECIATE, HOWEVER, YOUR ALLOWING ME TO SHARE MY HOPES AND SUGGESTIONS FOR A BETTER INVESTMENT IN OUR NATION'S FIRST AND OLDEST INDUSTRY.

STATEMENT OF THE WESTERN FOOD LEGUME ORGANIZATIONS

EXECUTIVE SUMMARY

An international institute for research on cool season legumes is proposed. It is emphasized that this proposal is for support funding for ongoing programs and such new programs that may be necessary in the western states and not for land or buildings. The proposal is in response to urgent and persistent needs in the U.S. and developing countries. The needs stem from the necessity to increase productivity and quality of food legumes which have failed to increase in recent years, in contrast to those of cereals.

The Institute represents a significant innovation and an entirely new concept for foreign aid. Its functions will be to plan, develop, coordinate, and evaluate research programs; investigate research opportunities; organize and plan for technical resources; and receive and manage supporting funds that will benefit both U.S. and foreign agriculture and agricultural research. The Institute will have effective linkages among the producing states in the U.S. and with the international food legume scientific community.

Program

The primary commodities addressed will be peas, lentils, and chickpeas; faba beans and lupines will be secondary crops. The overall objective of the Institute will be to improve the production and utilization of these cool season food legumes worldwide. The objective encompasses the goal of bringing food legumes to a dependable level of productivity so they can become more sustainable crops in both the U.S. and developing countries.

Program thrusts through which the objectives will be carried out are:

1. Germplasm enhancement and utilization
2. Plant protection
3. Crop and ecosystem management
4. Economics
5. Marketing
6. Human nutrition and processing
7. Technology transfer
8. Scientific information exchange
9. Professional education

Location

The Institute will function in the western states where a major proportion of all of the U.S. food legumes are grown. These states have:

1. Industry leadership that is innovative, aggressive, supportive, and accustomed to funding research through self-assessment programs
2. Scientific expertise needed to solve food legume problems in a wide range of biological, physical, and social science disciplines at university and ARS stations
3. Land, buildings, facilities, and equipment for research on food legumes
4. Ongoing programs and a history of over 30 years of effective research and extension on cool season legumes
5. Growing environments and production problems similar to those found in many developing countries

6. Effective linkages to international agricultural research centers and other food legume researchers around the world

7. Considerable successful experience in carrying out collaborative, multidisciplinary regional programs

The Institute will build on these existing resources and strengths, and thus will provide excellent payoff from relatively modest additional investments.

Resources

Resources for the proposed Institute program will come from the following sources:

1. Commodity commissions will provide annual support through their self-assessment programs.
2. State experiment station professional personnel, land, buildings, and facilities will be used to carry out research activities supported by the Institute.
3. ARS expects to participate by conducting research on specific funded projects, making research data and plant materials available, providing technical assistance and expertise, and otherwise being supportive of Institute objectives.
4. Additional funds of $5 million per year to support the program for 5 years are being sought from the federal government.

The program will be coordinated by a nonprofit foundation, with a board of directors making decisions on projects to be supported. Funds will be allocated to projects on a competitive basis after careful review by technical committees. Competition will be open to personnel at any U.S.-based land grant or nonland grant university, private industry, or government agency.

The entire concept of the Institute and its programs will be thoroughly evaluated after 3 years of operations. Based on this evaluation, a recommendation will be made to the funding agencies on a decision to continue the program beyond the fifth year.

Criteria for funding projects

Major criteria to be used in selecting projects for funding will be:

1. National and regional importance of the problem and responsiveness to the expressed needs and priorities of legume producers in the U.S. and developing countries
2. Evidence that the project will not duplicate work already underway in the international research community
3. Feasibility from a scientific standpoint
4. Probability of success

Benefits

The Institute will contribute to the enhancement of agricultural production in the U.S. and developing countries. Information generated will contribute to food legumes becoming more sustainable enterprises, increased productivity, lowered per-unit production costs, and increased profitability for growers in developing countries and the U.S. The Institute will help developing countries solve major problems related to cool season legume production and strengthen their scientific capacity to solve such problems in the future. U.S. consumers and the public will benefit in terms of a more dependable supply, improved quality and nutritional values, improved environment from decreased use of chemicals and control of erosion, and desirable impacts on employment and income from an expanded and healthier food legume industry. The U.S. scientific community involved with research and training in food legumes will be strengthened.

HEALTH INDUSTRY MANUFACTURERS ASSOCIATION

STATEMENT OF FRANK E. SAMUEL, JR., PRESIDENT

ACCOMPANIED BY:

GERALD MOSSINGHOFF, PRESIDENT, PHARMACEUTICAL MANUFACTURERS ASSOCIATION

JOHN WALDEN, SENIOR VICE PRESIDENT, DIRECTOR, PUBLIC AFFAIRS, PROPRIETARY ASSOCIATION

Senator BURDICK. Our next witness will be Mr. Frank Samuel, president of the Health Industry Manufacturers Association. He is accompanied by Mr. Gerald Mossinghoff, president of the Pharmaceutical Manufacturers Association, and Mr. John Walden, senior vice president, and director of public affairs, Proprietary Association.

Mr. SAMUEL. Thank you, Mr. Chairman.

I have a statement that I would like to have included in the record.

We are here to shift your focus to the Food and Drug Administration, and various regulatory matters involved in the appropriation for that agency.

When I appeared here a year ago, we made a request to the committee for an additional $5 million to be appropriated to the Food and Drug Administration for the purpose of overcoming the substantial delays in the approval of products.

Thanks to this committee, and the hard work that you and your colleagues, and the staff, put in on the appropriations matters for FDA, a portion of that request was granted. So the first thing I want to do today is to thank you, and the staff, and members of the committee, for that response.

We are back this year to renew that request because despite the assistance that we were able to help to give to the FDA last year, the problem continues.

One of the key indicators of FDA's productivity is the rate at which they approve new products. The rate of new product approvals at FDA for medical equipment and supplies has increased by about 15 percent from 1985 to 1986.

Consequently, we feel, that it is necessary for us to come before this committee, despite the very tough budget factors that you have to take into account, to renew our request for additional support for FDA.

Granted, everything has its price, and the price of regulatory delay such as we are experiencing at FDA is also very high. We have set forth in our prepared statement, on pages 2 and 3, some examples of the price that we pay when delays occur.

Let me mention just one product, and that product is a new one, approved just a year or so ago by the experiment station, which prevents sudden death in the case of certain patients with cardiac eurhythmics, irregular heartbeats. At the time that that product was approved by the Food and Drug Administration, it was estimated by the Secretary of HHS that from 10,000 to 12,000 lives a year could be saved with that device.

It means, very roughly, on the order of 1,000 lives a month could have been saved if that instrument had been fully diffused into the health care system.

That product was the subject of critical trials for years, and then it was in the FDA's approval process for 19 months. I am not here to argue whether or not the approval should have taken 19 months in the case of that device, 18 months, 17 months, or in 25 months.

The point is that each month that that product was kept off the market, and kept from reaching patients, up to 1,000 people may have died as a result. That is a real patient benefit that can be achieved at this time, and that is a problem that we are trying to deal with.

I guess that the bottom line, therefore, is that we are not talking about just numbers, or about abstract considerations of public administration of regulatory agencies. What we are concerned about is patient lives, and that is what this modest amount of additional assistance to the agency can provide.

Let me make one final comment about what is called by the administration user fees, which is, in fact, a tax on research and development. The administration includes a so-called user fee proposal in its budget for FDA for both products in the medical device and equipment area, as well as the pharmaceutical area.

Frankly, we don't see, in this day and age, when we are concerned about innovation, concerned about our international competitiveness, and concerned about the quality of health care in our nation, why taxing the R&D process is going to contribute to that. We think that it will have exactly the opposite effect.

Moreover, in our industry, we have many thousands of very small companies. We think that simply on the basis of practicality, it will be very difficult to construct a taxation system that would be bearable to small companies, that would not impede innovation, and that would still raise a significant amount of money, and we simply think it will not be worth a candle, in addition to all the other problems that we have.

In closing, let me say, again, we appreciate the tough job that you, your committee, and your staff have. It is no easy matter to resolve these considerations. We very much appreciate the attention you have given to FDA in the past, and we hope that you will be able to continue that in this session.

Thank you very much, Mr. Chairman.

Senator BURDICK. Do you have additional remarks?

Mr. MOSSINGHOFF. Yes, thank you, Mr. Chairman.

Mr. Chairman, my name is Gerald Mossinghoff, and I am president of the Pharmaceutical Manufacturers Association. Our association represents more than 100 research-based pharmaceutical companies that discover, develop, and produce most of the prescription medicines used in the United States.

In the interest of time of the subcommittee, Mr. Chairman, I would like to associate myself completely with Mr. Samuel's remarks. PMA strongly opposes the administration's user fee proposal on the grounds that in reality it would really be an excise tax on research and development.

Instead of permitting the FDA to charge user fees, we urge the subcommittee to provide the agency appropriations of $484 million to carry out the administration's recommended fiscal year 1988 budget request.

Attached to my statement, Mr. Chairman, which I would request be placed in the record of the hearing, is analysis by the Institute for Research on the economics of taxation, describing the differences, in their view, between user fees and excise taxes.

The analysis concludes that the user fees proposed for the FDA are really excise taxes, and mostly because they distort the pricing structure of the market, excise taxes are one of the worst ways for the government to raise revenue. The analysis says that it is a remarkable position for the government to take, that the government should choose to regulate an industry, and then claim that the industry receives substantial benefits by the government not putting it out of business.

Mr. Chairman, we appreciate your efforts last year in barring the use of user fees, and providing additional appropriations for FDA, and we ask the subcommittee to follow the same course this year.

Thank you, Mr. Chairman.

Senator BURDICK. Mr. Walden, do you also have a statement?

Mr. WALDEN. Yes, thank you, Mr. Chairman.

I am John T. Walden, senior vice president of the Proprietary Association. I am here on behalf of Mr. Cope, who is ill. With your permission, I will summarize our prepared remarks, and ask that they be introduced in the record.

To begin, our association would commend the work of the Food and Drug Administration, under the able leadership of Commissioner Frank Young. The FDA does essential work in protecting the public health and safety. It does that work well, and deserves the funds it needs to continue doing so.

In 1986 alone, the FDA faced an enormous burden in trying to deal with the criminal tampering of products, the OTC products that our members make and sell. We urge full funding of the Food and Drug Administration.

Mr. Chairman, our organization has represented makers of the nonprescription, over-the-counter medicine. We oppose user fees for two particular reasons. First, the OTC medicines almost never enjoy an exclusive protected marketing position.

By the time enough is known about a particular medicine to allow its sale without a prescription, the medicine, although effective, does not provide unique advances in medical care. Thus, over-the-counter medicine does not expand the medicine marketplace. For example, Americans don't have more pain because a new analgesic has entered the market.

The new product must seek to carve out a place for itself in an already crowded field, filled with tough competitors selling products whose names may be household words. This means that the makers of the new OTC cannot easily recover the cost of the user fee. The pressures of the competitive market simply won't allow it.

User fees would, thus, impose a costly charge on the makers of nonprescription medicines, and especially the many small businesses which make up our industry. To the extent that the expense of user fees discourages new over-the-counter medicines coming onto the market, they also impose an unnecessary restraint on the new consumer choices.

Let me make one final point. Increasing numbers of today's over-the-counter medicines are medicines with well recognized records of safety, and with hard scientific evidence of effectiveness established when they were available only through prescription.

Based on the prescription-only record, and on the fact that consumers have proven over time their ability to use these medicines safely, the medicines have been switched by FDA from prescription to nonprescription state. This is a dynamic process which maintains safety and effectiveness, while making proven medicines more readily available to more people at greater convenience, and generally at lower cost.

The added cost of bringing new over-the-counter medicines to market through a new drug approval process that is subject to user fees would discourage the switch process. It would slow the transfer of scientific progress in medicines to a greater number of people, and it would increase the cost to consumers of those medicines which do get through.

This proposal of user fees is not new to the Congress, nor to this subcommittee. Congress has in the past opposed it, and we urge you to continue that opposition. It is the wrong solution of a right need, and that is full funding for an important agency of consumer health and safety.

Thank you, Mr. Chairman, for the opportunity to appear. We will answer any questions that you might have.

Senator BURDICK. I have one question, Mr. Samuel. Although some progress has been made with respect to reducing delays in product approvals, your organization contends that increased staff would help to eliminate delays.

Mr. SAMUEL. The key requirement set forth for is 6 month, and the average time is 13 months. We would obviously like to see the additional personnel used to reduce the average time down to statutorily prescribed limits.

We applaud Dr. Franklin's efforts in his action plan to speed the approval of new pharmaceutical products. Right now, our situation is quite the reverse. The statutory time limit set by the Congress is the same 6 months, but the average time it took for the new drugs approved last year was 34 months. So it was a lot longer than Congress has indicated.

I think that the funds Dr. Young has requested to do full-time equivalents in the budget, augmented, hopefully, if he can find other areas to provide additional personnel, would be helpful to him and his staff in carrying out their very well conceived action plan, which we have worked with them on.

Senator BURDICK. What do you recommend as the ideal approval time?

Mr. SAMUEL. Dr. Young has set a goal of 12 months. If they get anywhere near that 12 months, our industry would be well ahead of where we are right now, Mr. Chairman. I think that with the increased resources, and the increased willingness on the part of the FDA, 20 new drugs were approved last year, 15 of those had already been approved in many developing countries around the world, which have the same amount of skills, the same amount of concern for their citizens as the FDA has concern for U.S. citizens.

We think that it is a matter of resources, coupled with the action plan, and we will be able to turn the tide around in the Food and Drug Administration.

Senator BURDICK. New regulations were just issued on drug investigations. What is your opinion of these regulations?

Mr. SAMUEL. We recognize that those regulations are a major change in the Food and Drug Administration's efforts. Our board of directors is meeting tomorrow with Dr. Young to consider those new regulations. We are as anxious as anyone to have our new medicines available to people who need them, particularly for those with life threatening or serious illnesses.

On the other hand, there are concerns about the new regulations to make sure that only drugs that are safe and effective can be used in these contexts, and also to make sure that the permission of letting these nonapproved drugs be used does not in any way diminish the efforts of FDA to bring new drugs to final approval, so that they can be widely used rather than just in clinical or controlled settings.

We applaud the effort to attempt to solve the problem, but we do have some concerns that our board will address tomorrow.

Senator BURDICK. How do you view the user fees in the research and development?

Mr. MOSSINGHOFF. The federal law, as we understand it, requires that products such as ours would not be subject to taxation, we regard specific user fees as taxation. We think that it is illegal under federal law, and it is not a legality or illegality of size. We think that it is a very unwise policy.

Mr. SAMUEL. In addition to that, Mr. Chairman, until the time that an application is approved, the device cannot be legally marketed. It is still in development. It is still subject to, perhaps, further requests by FDA for testing, or for additional current data, and it is not a completed product. There is no assurance, in fact, that the device will be delivered to the market. It is part of the development process of getting to the market, and as such it is part of a very sensitive and fragile part of the development process.

Mr. WALDEN. Mr. Chairman, one of the things that disturbs us most is that this is a review, and the tax would apply whether or not the review should result in a favorable action, such as approval. It is not just if you get approval that you get taxed, it is a review tax.

Senator BURDICK. If the administration's proposal were adopted, how would the user fees affect the development of drugs?

Mr. MOSSINGHOFF. Mr. Chairman, as we read the administration's budget, the great majority of user fees would be used simply to replace appropriations. On the drug side, the user fees would total $25.8 million according to the administration, although we have no idea how they reached that number.

There is no background data that is available to the public on how they get to that number. They only spent $37 million on entirely new drug evaluations. I have a feeling that a great majority of the money would simply replace existing appropriations and, therefore, simply be a tax, a revenue raising measure. There is $3.3 million in their budget, which we can identify for improving new drug evaluations.

Senator BURDICK. Thank you very much for your contributions.

[The statements follow:]

STATEMENT OF FRANK E. SAMUEL, JR.

Mr. Chairman, I am Frank E. Samuel Jr., President of the Health Industry Manufacturers Association (HIMA), the trade association of the medical device, diagnostic products and health information systems industry. Small companies comprise the bulk of our industry; two-thirds of HIMA's 300 members have annual revenues of less than $20 million.

HIMA companies are the innovators and developers of medical technology. Their spending for research and development -- more than three times the national industrial average -- helps push the frontiers of medical science and achievement to the point that many of our products are thought of as miracles. And they do produce miracles by saving lives, correcting deformities and relieving pain and anxiety. But it sometimes seems the real miracle is that these products are available at all.

An innovative technology may take a decade to go from idea, through product development, to clinical trials, and these steps are just the admission ticket to a formidable obstacle course: the Food and Drug Administration (FDA) product approval process. That approval process at FDA's Center for Devices and Radiological Health (CDRH) still does not have the resources to keep up with increasing device submissions. Delays in regulatory decisions mean delays in product improvements. And delays in product improvements mean delays in patient benefits.

I had the privilege of testifying before your committee last year when you were considering FDA's appropriation. At that time, CDRH estimated that it would take about 100 new positions to cut the backlog and significantly reduce review times. HIMA requested an additional $5 million for CDRH to be used to fund approximately 70 new staff years to work specifically on medical device and diagnostic product reviews. The Congress did provide about $820,000 in additional funding for CDRH, and that, plus resource shifting and new hiring by FDA administrators, meant that about 23 more people will be working on product reviews in FY'87.

We are grateful for these 23 positions, but they are less than a third of what we requested and less than a quarter of what FDA said it needed. And the workload is also continuing to grow (Table 1). One key measure of productivity -- pre-market approval (PMA) review time -- went up 18 percent from '85 to '86 (11 to 13 months) (Table 2).

It will take more than incremental improvements to get approval times for PMA's down to 6 months - the time limit Congress mandated.

Therefore, we are reneving our request for FDA for FY'88:

o An additional $5 million for CDRH—about 1 percent of FDA's total budget. We ask that this $5 million for CDRH be used to fund approximately 70 new staff years to be devoted to work specifically on medical device and diagnostic product reviews. These 70, added to the 23 staff years already provided, will approach last year's estimate of what was needed to reduce the backlog and bring down the time delays.

The American people deserve to have the benefits of medical technology advances available to them at the earliest possible time that reasonable safety and effectiveness can be assured. No one should die or go on suffering needlessly because staff resources were not available to get the job done. Further delay means inadequate care.

CONTINUING PRODUCT APPROVAL DELAYS

Commissioner Young's Action Plan (now in Phase II) and good management initiatives in CDRH and the Office of Device Evaluation (ODE) are showing

FDA's good faith and commitment to helping reduce the regulatory lag in devices. For example, real progress was made in FY'86 in reducing the backlog in pre-market approval applications. The Agency approved almost twice the number it approved in FY'85. But the average review time lengthened to 13 months and over the last five years, the trend in numbers of applications has continued to climb. When average review time falls in one area, it seems to rise in another. The Agency seems caught in a dilemma of having to rob Peter to pay Paul (Table III).

And in addition to product review, FDA needs resources to maintain a strong capacity to work on other crucial public health issues, such as product tampering. It also needs to improve its capacity to deal with imports of products manufactured abroad which are not subject to the same degree of regulatory controls (e.g., Good Manufacturing Practices).

THE PRICE OF DELAY

Devices which require premarket approval are new technologies which also offer the most significant patient benefits. Because they are innovative, they are often more complex and complicated--but they have also gone through exhaustive testing and trials, sometimes amounting to years, before an application is ever filed. The pre-market approval process should be the last mile of a marathon, not the first. Patients waiting anxiously the end of the race are left frustrated and bewildered -- and all too often -- suffering because of the lengthy delays.

In the Office of Device Evaluation's Annual Report for FY'86, FDA points with pride at having approved four "technological breakthrough" medical devices: the automatic implantable cardiac defibrillator; the multichannel implantable hearing prosthesis, a variable rate single chamber pacemaker; and a transesophogeal pacemaker. The benefits of these new technologies border on the miraculous. But how long did it take for patients to have these miracles available to them?

The defibrillator, which can reverse a sudden cardiac arrest, took 19 months to approve, added on to the four years the defibrillator was in clinical trials. When it was approved, Secretary Heckler estimated that 10,000-20,000 lives could be saved each year by use of the defibrillator. Every additional month of regulatory delay meant thousands of lives lost.

The multichannel implantable hearing prosthesis gives profoundly deaf people the ability to hear a range of sound--where before there was only silence. From original submission to final approval took 17 months.

The variable rate pacemaker allows heart patients to lead a more active and normal life. It took almost 11 months to approve. The transesophageal pacemaker, a different type of pacing device which reduces certain risks, took 17 months.

These products represent the leading edge of technology advance with significant benefits to patients. Other products are revolutionizing the diagnosis of disease, improving survival in the treatment of cancer, replacing damaged and worn out body parts with new materials which bring renewal and freedom from pain. Approval times for these products took from 13 to 21 months. These and products like them ought to be reviewed expeditiously and given the highest priority. They can be reviewed expeditiously only if there are FDA personnel: (1) in sufficient numbers, and (2) with sufficient training to deal responsibly with the significant public health and technical question involved.

THE SOLUTION TO DELAYS: More Resources for FDA

Efficiency Gains

In times of budget restraint, efficiency in the use of resources is a priority. For the past two years, HIMA has been working diligently with Commissioner Young and the CDRH to improve communications between our member companies and FDA and to assist FDA in realizing internal efficiencies. (A new electronic system for transmitting information between FDA and companies is one example.)

The Commissioner's efforts and our own educational efforts with member companies are bearing fruit, and we do not denigrate the progress that the Center has made in reducing the backlog. However, the high number of product submissions shows every indication of continuing. For example, at the end of FY'86, FDA had approved over 200 applications for companies to begin clinical trials on new products. This is approximately a four-fold increase since 1980. These submissions are the beginning of a process that may result in a pre-market approval application. With its current or anticipated resources, the agency will not be able to keep pace with the growth in product submissions.

Administration Budget

The Administration's FY'88 budget calls for $450 million in FDA appropriations and $34 million to be raised by the imposition of research and development taxes on innovation in the form of user fees for new drug and device applications ($8 million from devices). And it is truly that: a tax. The proposal would tax the process through which new ideas are sought and then converted to products for patients.

The Administration is basically calling for flat funding for FDA. The only addition to resources would result from this unauthorized "tax." This proposal just confirms what industry fears -- the government continues to reduce its commitment and industry is called upon to provide the additional funds necessary to keep FDA operating at current levels.

The current administration budget request points this up. In FDA's FY'88 budget estimates for devices and radiological products, they are showing a $4.2 million dollar increase over FY'87 estimates -- including an additional $600,000 and 12 staff years for product review. In reality, these so called increases are based on a projected revenue increase of $8 million collected in product review charges from manufacturers. The actual budget authority requested is almost $4 million below the amount available in FY'87. If the product review charges are not approved by the Congress (and legislation has not yet been introduced by FDA), and if the Congress does not appropriate funds to make up the shortfall, FDA will be in serious difficulties, unable to perform at current service levels.

The proposal for drug application fees has been made before, but this is the first year that devices have been included. This committee has expressed its opinion on user fees in the past, and I will not belabor the point here, except to urge you to continue to oppose the imposition of such user fees by FDA. Our products must go through a product approval process at FDA because the Congress determined that it was to the public's benefit to establish safety and effectiveness. As a public benefit, it should be funded, and funded adequately, by public funds, not by imposing an ill-disguised tax on the research and development process.

There is no paucity of ideas on how to make America competitive. While we offer no special expertise in this subject, we say with absolute certainty that the way to become less competitive is to tax the very process that has allowed our industry to produce new technologies for patients and a trade surplus for the nation.

HIMA's Funding Request

We propose an additional $5 million in the FY'88 budget for CDRH, to be used to fund approximately 70 new people to do product reviews. These new people could help CDRH cut review periods and the backlog of applications.

This $5 million proposal represents about a 7 percent increase over the Administration's FY'88 proposal for CDRH and about a 1 percent increase over FDA's total budget. This proposal is reasonable, it is needed, and we respectfully request the Committee to approve it. Improved patient care depends on it.

Table I

Product Review Applications
(Workload)

Year	PMA's	PMA Supplements	510(k)'s	IDE's	IDE Supplements	Total Submissions
1980	62	165	3,164	56	500	3,947
1981	60	259	3,648	199	924	5,126
1982	90	277	3,798	185	1,694	6,044
1983	76	360	4,342	177	2,750	7,705
1984	65	430	5,035	208	3,077	8,815
1985	95	393	5,260	200	2,430	8,378
1986	69	478	5,063	206	2,884	8,906

PMA = Pre-market Approval
510(k) = Pre-market Notification
IDE = Investigational Device Exemption

Table II

PMA* Review Time
(Statutory deadline of 180 days)

Fiscal Year	Days
1982	294 (9.8 mo.)
1983	329 (11.0 mo.)
1984	470 (15.7 mo.)
1985	347 (11.5 mo.)
1986	395 (13.1 mo.)

* Pre-market Approval

Table III

Changes in Average Review Times (Days)
1985-1986

PMA Change	41 day increase
PMA Supplement Change	54 day decrease
IDE Change	2 day decrease
IDE Supplements	83 day increase
510(k)'s	4 day decrease

STATEMENT OF GERALD J. MOSSINGHOFF

I am Gerald J. Mossinghoff, President of the Pharmaceutical Manufacturers Association. PMA represents more than 100 research-based pharmaceutical companies that discover, develop and produce most of the prescription medicines used in the United States. I appreciate this opportunity to appear before the Subcommmitee and testify on the Administration's Fiscal Year 1988 budget for the Food and Drug Administration, including the proposal to authorize the FDA to charge user fees for processing applications for new drugs and medical devices.

The FDA budget totals $484 million, of which $33.8 million would result from user fees "for the review of manufacturers' applications to market new drugs and medical devices," with $25.8 million coming from drugs and $8 million from devices.

PMA strongly opposes the Administration's user-fee proposal on the grounds that, in reality, it would be an excise tax on a legally mandated process conducted by the Government to benefit the general public. Instead of permitting the FDA to charge user fees, we urge the Subcommittee to provide the agency appropriations of $484 million to carry out the Administration's recommended FY 1988 program.

In its budget documents, the Administration does not attempt to justify its proposal or explain how it arrived at an estimate of $33.8 million in receipts. Nor has the agency demonstrated that fair and equitable charges can be developed for widely differing new drugs and medical devices. Further, if, as we understand the proposal, the fees would be charged only for applications for innovative products and not for applications to market generic copies of those products, it discriminates on its face against the research-based firms that develop the pioneer life-saving drugs.

The proposal conflicts with the policy announced by the Office of Management and Budget that the Government's budget deficit be reduced by "non-tax" revenue-increasing measures, and that user fees not be imposed for services that can be primarily considered as broadly benefiting the general public. OMB Circular A-25 specifically cites the "licensing of new biological products" as an example of a service for which user fees would not be appropriate. In fact, the Administration's proposal is for an excise tax to be imposed for a legally required pre-marketing approval program established exclusively to protect the general public's health and safety.

Attached to this statement is an analysis prepared by the Institute for Research on the Economics of Taxation describing the differences between user fees and excise taxes. The analysis concludes that fees charged for the approval of new drugs are really "excise taxes," and it notes that "because they distort the pricing structure of the market, excise taxes are among the worst ways that a government can raise revenue." The analysis says it is "a remarkable position for a government to take" that "the government can choose to impose regulatory constraints on an activity...and then assert that the regulated parties benefit by not being drummed out of business."

Under the Administration's proposal, as outlined in an FDA "Talk Paper" of January 28, 1987 and the FDA Fiscal Year 1988 Budget Justification, $1.6 million of the $25.8 million proposed to be charged for new-drug applications would fund staff increases for the new-drug review process. An additional $1.7 million would be used to offset other increases in the "New Drug

Evaluation" sub-line-item. This means that only $3.3 million of the $25.8 million charged for processing new-drug applications would be used to improve the new-drug review process.

For these and other reasons, Congress for the past three years has quite properly rejected the Administration's proposals to authorize the FDA to charge user-fees. PMA strongly urges Congress to do so again.

Last year, at the recommendation of this Subcommittee, Congress also increased the appropriations available to FDA to improve its efforts to protect public health and safety. We urge this Subcommittee to increase these appropriations once more.

Despite the very dedicated and able efforts of Commissioner Frank E. Young and his staff, FDA still takes much too long to approve new drugs. For the 20 new drugs approved by FDA in 1986, it took on average more than 34 months from the filing of a new-drug application for the agency to complete its review and approval of these drugs--more than five times longer than the statutory requirement. Fifteen of those 20 new drugs were first approved in other developed countries, on average in less than a third of the FDA review time.

It is imperative--now more than ever--that FDA have sufficient funds to ensure that new medicines become available to the public without undue delays, for the research-based pharmaceutical industry is on the threshold of what promises to be its most innovative period. PMA companies invested a record $4.6 billion in research and development last year, and have doubled their investment in R&D every five years since 1970.

A recent survey of more than 220 "world-class" research scientists--conducted by Louis Harris and Associates, Inc. for Bristol-Myers Company--describes important new therapies expected to be developed in the years ahead. Most of these products will be produced as a result of the research efforts of our member companies.

In the near future, our companies are expected to develop more medicines through the exciting new techniques of biotechnology, including drugs to prevent and treat cancer, leukemia, hepatitis and malaria. Our companies are working to develop new drugs that scientists expect will help to push the cure rate for cancer from 50 percent today to 67 percent by the year 2000. In the cardiovascular area, our companies are developing new clot-dissolving, anti-arrythmia and plaque-dissolving agents as well as drugs to minimize the damage to heart muscle after a heart attack. Of most pressing importance, our industry is engaged in an all-out effort to conquer what is fast emerging as one of the most insidious diseases the world has ever known--AIDS.

The FDA must receive enough funds to be able to approve these and other important new medicines--consistent with safety considerations--as expeditiously as possible, in the interests of public health.

Mr. Chairman, that concludes my prepared statement. I will be pleased to answer any questions you or other members of the Subcommittee may have.

IRET OP ED

USER FEE OR EXCISE TAX?

User fees have become an increasingly attractive revenue vehicle for a congress caught between the Gramm-Rudman-Hollings deficit target and an administration adamantly opposed to tax increases. The Administration has for many years advocated relying more on user fees, and it is its willingness to accept new user fees and higher rates on existing ones that has led the Congress to reconsider their advisability. There is an appropriate role for user fees in the government's revenue arsenal, and it may well be appropriate to increase some of the current fees and to introduce new ones. But some of the proposed user fees are really excise taxes in disguise, for which there is seldom, if ever, an appropriate occasion. Unless the Congress wants to be party to a fiscal shell game, it would do well to distinguish clearly between user fees and excises. Failure to do so risks damaging the market for many goods and services, including meat and poultry products, pharmaceuticals, and private pensions.

A user fee is the price charged by the government for a particular product or service it provides. An individual or firm will pay the user fee when it chooses to buy the product or service, and it will only make that choice if it believes the benefits to be obtained from the product or service are worth at least as much as the cost, and if those benefits cannot be obtained elsewhere at a lower price. The fee the government charges may be less than the real cost of the product or service, since it may elect to subsidize the purchase. The user fee, however, can exceed the cost of provision only if the government is capable of providing the product or service at a lower cost – and at a lower price – than anyone in the private sector can.

In contrast, an excise tax is not a price you willingly pay in exchange for a particular product or service. It is, instead, exacted from you without the specific quid-pro-quo typical of market transactions. The effect of an excise tax is artificially to increase the price to be paid for the product or service on which the tax is imposed, over and above the price determined in the marketplace.

A rationale offered for levying some excises is that they make producers who impose costs on society in excess of the costs they incur internalize this excess cost. Other excises are imposed ostensibly because public policy makers believe consumers of the product should consume less of it. Whatever the merits of these rationales, they have not historically dictated what excises the government imposes or at what rates. The basic reason for laying them on is because they raise revenues; it is difficult to imagine what costs telephone users are sloughing off onto other members of the community in a country where virtually all individuals are telephone customers, or why public policy makers would think we should use our phones less.

No matter why we have them, excises distort signals about what the taxed products or services are worth relative to untaxed outputs. They are the worst taxes in our system and should be used, if at all, only as a last resort. Because excises are selective in their burdens, they are not appropriate revenue devices for reducing the government's budget deficit, for which everyone, not just consumers and producers of excise taxes products, should be responsible.

When the government charges a user fee the proceeds from the fee should be allocated to, and made available for, defraying the costs of providing the product or service. If user fees are not so restricted, it is clear that they will go to defraying the cost of other government activities which do not necessarily afford benefits to those paying the fees. Conversely, when the government imposes an excise tax it produces discretionary income. In the general case, it commingles those revenues with its revenues from other sources to finance all of its activities, the benefits of which, if any, are more or less widely dispersed. It may choose to earmark the proceeds of the tax and may do so in favor of the taxed activity or any other program. The earmarking of revenues, however, in no way alters its nature as a tax.

Nowhere is this blurring of the distinction between taxes and user fees more apparent than in the current proposal to impose a "user fee" to offset the costs incurred by the federal government in enforcing compliance with certain regulatory programs. The Administration, for example, wants to charge meat and poultry processors a "user fee" for inspection of the products. The Administration itself notes that all meat and poultry processing must occur under federal inspection and that any levies imposed in connection with this regulatory program can't be avoided except by abandoning the business. Since market transactions are voluntary in nature, and since user fees are proxies for prices, this clearly is not a user fee but an excise tax on those products. The Administration has also considered imposing a similar charge on pharmaceutical firms for the cost that the Food and Drug Adminstration incurs in approving new pharmaceuticals. The Administration takes a remarkable view of what constitutes a benefit from a government activity. When a pharmaceutical firm develops a new drug it must secure approval from the FDA before it can market it. This approval is required, presumably, in order to protect the *consumer* of the drug by promising that it is safe and effective. The Administration has taken the position (*The Federal Register*, March 12, 1987, p.7815) that the pharmaceutical manufacturer will receive the quid-pro-quo required to validate the proposed charge as a user fee because "the fee payers are granted the benefit of continued pursuit of the commercial or other activity (emphasis added)." This is a remarkable position for a government to take, to wit, that the government can choose to impose regulatory constraints on an activity – any activity – and then assert that the regulated parties benefit by virtue of not being drummed out of business. Using this logic one can quickly conjure up a world where taxpayers are assessed a fee to reimburse the federal government for the expenses the Internal Revenue Service incurs in collecting individuals' taxes.

The proposal to impose these charges doesn't include the commitment to limit their revenues to paying for the costs of the services. If the proceeds are allocated to general revenues, these charges will fail yet another test as a user fee.

Imposing charges on regulated firms ostensibly to pay for the regulatory activity can only lead to ever high prices for the products of those firms. Charging pharmaceutical companies for drug approval, for example, will necessarily result in higher pharmaceutical prices. The charge will be another component of the research and development costs associated with expanding the nation's pharmacopeia and improving its health care. This cost will have to be recovered in the prices of new pharmaceuticals. If it isn't, it must be expected that research and development work in the industry will contract. So, too, will progress in developing new medications.

What the Congress is being asked to approve, in fact, are user excise taxes. Because they distort the pricing structure of the market, excise taxes are among the worst ways that a government can raise revenue. Calling an excise tax a user fee doesn't moderate its distortion of prices. The Congress and the Administration would be well advised not to blur the distinction between taxes and user fees. At the moment that the collection rests on the power of government to exact rather than its ability to offer an exchange, you have crossed the line between the two.

Carlos E. Bonilla
Economist

Statement of John T. Walden

I. INTRODUCTION AND SUMMARY

Good afternoon, Mr. Chairman and Members of the Subcommittee. I am John T. Walden, Senior Vice President and Director of Public Affairs of The Proprietary Association. I am pleased to be part of the panel this afternoon before this distinguished Subcommittee which is considering the Food and Drug Administration (FDA) appropriation request. Specifically, we would like to present our views on the Administration's proposal to impose a user fee system -- which in effect is a "Research and Development (R & D) Tax" -- for FDA review of new drug and medical device applications. The tax would be levied against companies seeking FDA approval of new drugs and medical devices. It is our understanding that FDA is working on a separate legislative proposal to provide the Agency with authority to charge these user fees.

The Proprietary Association, which we call the "PA," is the century-old trade association representing manufacturers and distributors of over-the-counter ("OTC") medicines such as aspirin, cold tablets, cough syrups, and many others, some of which you probably have in your medicine cabinet at home. Some of these products are among the most commonly used consumer products in the United States, such as Bayer® Aspirin, Vicks Formula 44®, Anacin®, Bufferin®, Contac®, Tums®, and Tylenol®. PA members, large and small, account for about 95 percent of the sales of OTC medicines in the United States.

To begin with, Mr. Chairman, let me say FDA is one of our government's most important regulatory agencies, as it is charged with the responsibility of protecting the nation's health by assuring us that there is a constant supply of safe and effective medicines as well as pure foods. The Agency has done an exemplary job of protecting the nation's health under the stewardship of Commissioner Frank E. Young, M.D., Ph.D. For example, as we all regretfully know, FDA last year combated an unprecedented number of product tamperings, responding to the nation's needs with leadership, dispatch and efficiency. In fact, Mr. Chairman, FDA investigated more than 1,500 reports of product tamperings last year. This included not only reports of tamperings with over-the-counter medicines, but also possible contaminated food products. Just recently FDA reported to this Subcommittee that the 1986 costs in handling these emergencies amounted to over 500 person years and about $23 million which was derived largely by diverting FDA staff from normal field surveillance, investigational and analytical activities.

We believe the Agency's work in this and other areas is absolutely crucial and therefore we recommend to the Subcommittee that FDA be provided with whatever funds and personnel are necessary for it to carry out its Congressional mandate of protecting the American public. The Agency's request in 1988 is for $483.5 million, of which $33.8 million would be derived from collections of proposed product review charges. FDA proposes an increase of $1.6 million including 32 staff years to improve the new drug review process and $0.6 million including 12 staff years to improve medical device review process. We believe FDA should be provided with these increases and recommend that action for your consideration.

Mr. Chairman, as you know, the proposal for user fees has been made to Congress before. This Subcommittee has expressed its opinion on user fees in the past. We urge you to continue to oppose the imposition of the user fees -- or really the R & D tax.

New drugs and certain classes of medical devices must go through the approval process based on a Congressional mandate. That is, Congress has determined that it is in the public's interest of safety and health to require the review system. Since Congress has made this decision and charged FDA with the mandate to implement it, the Agency should be adequately funded to do its job well, by public resources. Congress has determined in the past FDA should not charge the R & D Tax, and as we understand it, the legislation that the Agency is drafting would result in an exemption or change in current public policy. We know of no sound public policy reason for any change and we once again urge this Subcommittee to appropriately fund FDA so the important Agency can carry out its responsibility in protecting the health and safety of the American public. Imposing an ill-disguised tax on the product approval process, the R & D process, is something that Congress has decided against in the past and we hope Congress would continue its wisdom in this area.

MR. CHAIRMAN, MORE SPECIFICALLY WE BELIEVE THE R & D TAX IS PARTICULARLY INAPPROPRIATE FOR OTC MEDICINES FOR TWO REASONS:

FIRST, THE R & D TAX HAS THE OPPOSITE INTENT OF "SWITCH."

As a result of the added cost of bringing new OTCs to the marketplace if a user fee system was imposed, there would be less increase in the availability of some OTCs and higher OTC drug prices to consumers, hitting the neediest drug populations -- the poor, the elderly and the infirm -- the hardest. This has the opposite effect of FDA's recent decisions to "switch" certain drugs from prescription to nonprescription status through the new drug approval process. Similarly, costs for timed-release preparations would also escalate and their availability would be affected if user fees were applied to the new drug approval process.

SECOND, OTCs HAVE NO PROTECTED MARKET POSITION AND THUS CANNOT RECOUP THE COST OF THE TAX.

OTCs generally are not new and novel enough to enjoy a protected marketing position due to a New Drug Application (NDA). The NDA'd OTC is usually a former prescription medicine shown to be safe and effective for consumer use without medical supervision. The NDA'd OTC may also be a well-established OTC labeled for new indications for use, or may constitute a new way of delivering the medicine.

Since OTCs do not have a protected market position they generally enter a mature marketplace, and must attempt to carve out a market share among a field of established, well known and tough competitors in a particular product category. OTCs therefore are not in the position to recoup the cost of the R & D Tax -- resulting in a costly burden for OTCs.

MR. CHAIRMAN, THERE ARE SEVERAL OTHER MORE BROAD REASONS WHY WE BELIEVE THE R & D TAX IS ILL ADVISED. FIRST, THE NEW DRUG APPROVAL PROCESS CONFERS A PUBLIC BENEFIT AND UNDER CURRENT LAW CANNOT BE SUBJECT TO USER FEES. WE SEE NO BASIS FOR WHICH TO CHANGE CURRENT LAW PROHIBITING USER FEES.

A review of present law establishes the rationale for prohibiting user fees when the public benefits. This should not be changed. The Independent Offices Appropriations Act (IOAA) of 1952, 31 U.S.C. Sec. 9701, allows government agencies, in certain circumstances, to charge for services they provide. The IOAA provides, in pertinent part:

> "(a) It is the sense of Congress that each service or thing of value provided by an agency (except a mixed-ownership government corporation) to a person (except a person on official business of the United States Government) is to be self-sustaining to the extent possible." 31 U.S.C. 9701.

The IOAA, in turn, is subject to the binding interpretation of the President:

> "(b) The head of each agency (except a mixed-ownership government corporation) may prescribe regulations establishing the charge for a service or thing of value provided by the agency. Regulations prescribed by the heads of executive agencies are subject to policies prescribed by the President and shall be as uniform as practicable." *Id.* [Emphasis added.]

Circular No. A-25 issued by the Bureau of the Budget (now Office of Management and Budget) on September 23, 1959, represents such a controlling policy. Moreover, the Supreme Court has upheld the policies and guidelines contained in Circular A-25, as "the proper construction of the [IOAA]." *Federal Power Commission v. New England Power Co.*, 415 U.S. 345 at 351 (1974).

Review of the IOAA, the Circular, and cases construing them, makes clear that imposition of user fees for review of new drug applications is prohibited. Imposition of user fees for government services is impermissible "when the identification of the ultimate beneficiary is obscure and the service can be primarily considered as benefiting broadly the general public (e.g., licensing of new biological products)." OMB Circular A-25 at 2. [Emphasis added.]

The drug approval system is precisely the kind of government activity that is ill-suited to levy of user fees and that may not be made subject to such fees. There is simply no question that the activity at issue -- the entire U.S. drug approval system -- primarily confers a public benefit within the meaning of the IOAA (as interpreted by the OMB Circular), and is therefore exempt from user fees. This is certainly not a situation where the public benefit can be characterized as merely "partial" or "incidental" to a private service. *See Electronic Industries Ass'n v. Federal Communications Commission*, 554 F.2d 1109, 1115 (D.C. Cir. 1976). Indeed, it is difficult to imagine another government activity where the public benefit is so pervasive and so profound as the drug approval system.

The Supreme Court has held that user fees may properly be levied under the IOAA "only [for] specific charges for specific services to specific individuals or companies." *Federal Power Commission v. New England Power Co.*, 415 U.S. 344, 349 (1974). "Whole industries," stressed the Court, "are not in the category of those who may be assessed . . . ." *Id.* The Administration's proposal, however, would result in the levying of user fees on a "whole industry" basis and we believe this is not appropriate.

Mr. Chairman, FDA has testified before this Subcommittee that its activity in the drug and medical device approval area clearly benefits industry. We certainly recognized the good work of the Agency in this area and as we have said before we believe FDA should be provided with adequate resources to discharge its public responsibility. We do not, however, believe the Agency's activity in the area *clearly* confers a benefit on industry [Emphasis added]. As the Agency itself observed in its 1983 User Charge Study, even NDA approval does not confer market exclusivity (as does a patent). Rather, approval represents the Agency's threshold determination that the particular drug satisfies the statutory criteria of safety and efficacy and that the drug is not adulterated and misbranded under the law:

> "The extent of federal benefit from [new drug review] can certainly be considered marginal by some, since it is not like a patent, which provides exclusive rights for a certain period of time. The benefit, to the extent it exists, is merely the meeting of a legal requirement necessary before the firm can enter a certain line of business -- selling new drugs . . . ."

FDA User Charge Study at 21. The Federal Food, Drug, and Cosmetic Act ("FDC Act") obliges the Agency to conduct new drug reviews as part of its public health protection mission. 21 U.S.C. 355. The new drug marketer, in turn, is obliged to obtain premarket approval, or be subject to criminal and civil sanctions. 21 U.S.C. 331, 332, 333, 334. See 50 Fed. Reg. 31727. As the Agency concluded in its User Charge Study, this FDC Act-mandated drug review process:

> "becomes a benefit to industry only if one construes the converse of a prohibition against illegal acts (marketing unsafe drugs) to be a 'benefit' in permitting one to do something legal. Using that kind of logic, paying your income tax could be construed as a 'benefit' in that it keeps you out of jail."

FDA User Charge Study at 42.

FDA itself has considered the issue of user fees several times during the last 20 years and has consistently rejected such a plan each time -- until now -- precisely for the reason we now advance against the concept: Namely, the public benefit exclusion prohibits user fees for new drug approvals and should not be changed.

In 1965, FDA responded to a Presidential request to review user fee policies, and concluded that the Agency's activities almost entirely benefit the general public and that only incidental benefit accrues to the regulated industries. See FDA User Charge Study at 7 et seq. In 1966 and 1967, FDA maintained its opposition to user fees on public benefit exclusion grounds. Id.

A GAO Report was issued in 1971 recommending user fees for new drug reviews, and FDA again maintained its opposition to such a plan: In a March 1972 letter to the House Committee on Government Operations, FDA reaffirmed its long-held position that user fees for review of new drug applications is prohibited on public benefit grounds. Id. at 9.

In its August 1983 User Charge Study, FDA again concluded that the "preponderance of legal views suggest that user fees should not be initiated . . . ." Id. at 57. The study represents a current and comprehensive evaluation by FDA of the public policy reasons for not imposing user fees.

The 1983 study concludes that a user fee system would result in increased drug costs to consumers, which is not in the public interest. Using the most conservative set of assumptions, FDA estimated that the full cost of user charges would be passed on to the consumer. Id. at 55. The authors of the study state, however, that:

> "it is highly likely that the consumer would end up paying substantially more than the Government's user charge costs once the effect of price increase has rippled through the distribution system."

Id. at 56.

The elderly and infirm will be hardest hit by the increases since they are the heaviest users of drugs. Id. at 56. This result is wholly contrary to the public interest and to the goals of the Drug Price Competition and Patent Term Restoration Act of 1984, infra.

Mr. Chairman, we believe FDA is doing a fine job and should be adequately funded by the government. We do not believe, however, industry should be asked to pay for Congressionally mandated activity that benefits and protects the public and we urge this Subcommittee to continue in its wisdom on the matter.

MR. CHAIRMAN, SECONDLY, THE PROPOSED USER FEE AMOUNTS TO A TAX, WHICH ONLY CONGRESS CAN LEVY. WE URGE CONGRESS NOT TO DO SUCH.

Many advocates including FDA have stated that the "growing Federal deficit makes the implementation of such charges (user fees) now advisable . . . ." 50 Fed. Reg. 31726.

A proper user "fee" must be based upon specific value to the recipient, without consideration of broader, unrelated benefits to society at large, such as reduction of the Federal deficit. See National Cable Television Association v. United States, 415 U.S. 336, 340-41 (1974); National Association of Broadcasters v. Federal Communications Commission, 554 F.2d 1118, 1128 (D.C. Cir. 1976).

The Supreme Court declared in National Cable Television Association that the addition of broad public policy considerations into "fee" determinations "carries an agency far from its customary orbit and puts it in search of revenue in the manner of an Appropriations Committee of the House." Id. at 341. The "fee" is thus transformed into a "tax." Taxation is a legislative function and Congress is the sole organ for levying taxes. Id.

at 340. (By Art. I, Sec. 8, Cl. 1 of the U.S. Constitution, it is the Congress that has the "power to lay and collect taxes.") The Court in National Cable Television Association held that "It would be such a sharp break with our traditions to conclude that Congress had bestowed on a federal agency the taxing power that we read 31 U.S.C. §483a [the IOAA] narrowly as authorizing not a 'tax' but a 'fee'." Id. at 341. The Administration's proposal to charge user fees in part because of the growing federal deficit causes these "fees" to be transformed into a "tax," and we urge Congress not to authorize it.

THIRDLY, MR. CHAIRMAN, THE R & D TAX WOULD IMPOSE AN UNDUE FINANCIAL BURDEN ON SMALL BUSINESSES AND MAY DEPRIVE CONSUMERS OF USEFUL DRUG PRODUCTS.

Imposing the R & D Tax on the new drug approval process will place an undue financial burden on small businesses and will create a disincentive for these companies to conduct research on new or innovative drug products. The research and development costs of obtaining FDA drug approval are already extremely high. If these costs were increased by several thousands of dollars many small manufacturers whose research budgets are already stretched, might not pursue research activities as to some potentially useful drug products. The outcome is that fewer potentially valuable drug products would be available to consumers, which is not in the public interest.

Smaller companies lack the resources available to many large companies, and the R & D Tax could place the small companies at a market disadvantage. FDA has acknowledged the competitive inequality that user charges could engender. In its 1983 User Charge Study the Agency commented that the imposition of the R & D Tax "could place a disproportionately larger cost burden on [small businesses] and could be viewed as discriminatory against small businesses engaged in drug manufacturing." FDA User Charge Study at 52. Such a program, therefore, "may run counter to federal efforts to provide incentives for small business." Id.

Congress considered drug price competition matters in its enactment of the Drug Price Competition and Patent Term Restoration Act of 1984. 98 Stat. 1585, Pub. L. No. 98-417. The purpose of the Act was to reduce the costs of drug products to the consumer and to accelerate the drug approval process. Although the law was expected to increase markedly the number of applications submitted to FDA, and to increase the Agency's workload, a review of the legislative history does not reveal that Congress considered a user fee scheme -- an R & D tax -- to be an appropriate means to offset the increased costs.

Indeed, in the floor discussion of the 1985 Senate-passed FDA appropriations bill one member sharply attacked the R & D Tax saying it "would completely undermine the important [Drug Price Competition and Patent Term Restoration] legislation we enacted last year" by pricing out of the FDA drug approval system those small companies who simply cannot afford to pay the application fees. 131 CONG. REC. S13313 (daily ed. October 16, 1985) (statement of Sen. Riegle).

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE, FOURTH AND VERY IMPORTANTLY, DURING THE LAST CONGRESS BOTH THE HOUSE AND SENATE APPROPRIATIONS COMMITTEES WENT ON RECORD AS OPPOSING A FDA R & D TAX ON PUBLIC BENEFIT GROUNDS. WE KNOW OF NO SOUND PUBLIC POLICY REASON WHY THE APPROPRIATIONS COMMITTEES OR CONGRESS SHOULD DEVIATE FROM THIS POSITION AND AUTHORIZE USER FEES.

The House Report accompanying the FDA appropriations bill for Fiscal Year (FY) 1985 stated: "The Committee is opposed to the idea of financing this activity [review of NDAs] through user fees. This opposition is based upon the clear public benefit of FDA's regulation of new drug approvals. Therefore, no resources are included in this bill for further consideration or development of a user fee proposal . . . ." H. Report 98-809 at 106-107. A similar provision was contained in the Senate Report. S. Report 98-566 at 122-123.

The House of Representatives reaffirmed its opposition to user fees, or R & D taxes, on July 24, 1985, by approving (354 to 71) an FDA appropriations bill (H.R. 3037) that specifically prohibited the imposition of an R & D Tax. Title V of the bill provides that "none of the funds in this Act shall be used to develop, establish, or operate any program of user fees authorized by 31 U.S.C. 9701."

The Senate also reaffirmed its position on October 16, 1985 and approved (81 to 14) an FDA appropriations bill (H.R. 3037) with an amendment deleting all previous references to user fees. The Senate floor discussion reveals strong sentiment against FDA user fees because they would discourage important research, amounting to "a tax on innovation that directly benefits mankind . . ." 131 CONG. REC. S13313, supra (statement of Sen. Specter). This is, essentially, an endorsement of the view that the IOAA proscribes FDA user fees because they constitute an R & D tax.

In addition, the leadership of the Senate Labor and Human Resources Committee, the Committee with legislative jurisdiction over the FDA, expressed doubts about the advisability of the user fees, or R & D Tax proposals. In an October 3, 1985 letter, Senators Hatch and Kennedy, then Chairman and Ranking Minority Member of the Committee, stated that:

> "[F]ederal policy under 31 U.S.C. Sec. 9701, the user fee authority for federal agencies, is that such fees should not be charged for governmental services which benefit the general public. The FDA's proposed levying of user fees in the pharmaceutical approval process, which insures the marketing of safe and effective drugs, raises doubts that this policy is being followed."

Letter to Sen. Cochran from Sens. Hatch and Kennedy (October 3, 1985), reprinted in 131 CONG. REC. S13313, *supra*.

The 1986 FDA Appropriations bill (H.R. 5177) contains a similar prohibition to user fees. The House Report accompanying the 1986 Appropriations bill stated: "Although FDA has taken a different tack in proposing user fees be authorized through separate specific legislation, the Committee is concerned that FDA's role in approving new drug applications is of direct public benefit and, as such, the process should not be burdened with user fees." H. Report 99-686 at 115-115.

FIFTH, MR. CHAIRMAN, AN R & D TAX ON MEDICINES IS NOT GUARANTEED TO INCREASE REVENUES TO FDA FOR DRUG APPROVAL PURPOSES AND IS NOT GUARANTEED TO BE USED SOLELY BY FDA FOR DRUG APPROVAL PURPOSES.

If the President were to sequester funds, as he did once before, the sequestered portion of the R & D Tax would not be allocated to FDA for any purpose. Under the IOAA, any "user fees" collected are deposited in the general Treasury. Thus, there is no established mechanism to direct funds collected back to the agencies whose programs generated them. The money raised is then simply a general revenue-raising device that is indistinguishable from a redistributional tax.

FINALLY, MR. CHAIRMAN, THE R & D TAX IS A DISINCENTIVE FOR PRODUCT DEVELOPMENT.

Even for companies with greater financial resources, the R & D Tax would operate as a disincentive to conduct research on new or innovative medicines, since it is a cost that would be imposed over and above any R & D expenditure for formulation, development, clinical trials, capital expenditure for machinery, etc.

In conclusion, Mr. Chairman, we believe the Administration's proposal to impose an R & D Tax on the new drug and medical device approval process is contrary to sound public policy. As we have stated before, we support FDA's appropriation request and recommend to this Subcommittee that the Agency be provided with whatever resources -- both money and people -- that are necessary to carry out its important Congressionally mandated mission. However, we do not believe that industry should be charged for implementation of this public responsibility.

In addition, we believe an R & D Tax for OTC drugs is particularly inappropriate because it would discourage the "switch" of prescription drugs to inexpensive and readily available nonprescription or OTC medicines and would adversely affect OTCs, which do not have a protected market position in that they would be unable to recoup the cost of the R & D Tax.

Thank you for the opportunity to present these views, Mr. Chairman.

BREAD FOR THE WORLD

STATEMENT OF REV. ARTHUR SIMON, EXECUTIVE DIRECTOR

Senator BURDICK. Our last witness will be the Reverend Arthur Simon, executive director of Bread for the World.

Reverend SIMON. Thank you, Mr. Chairman.

I will enter my written comments for the record, and let me summarize them in just a few minutes.

I am here to speak in support of Senate Joint Resolution 99, the WIC Food for Life Resolution, which proposes additional funding for the Women, Infants and Children Program of $150 million for fiscal year 1988, as well as additional similar increases in subsequent years, until the program gets to the point where it can reach all of the persons who qualify for that program, who wish to be on it.

There are basically two reasons why Bread for the World supports that program and that particular resolution to increase funding. The first reason is prudent economics. I think that if I were a legislator with a heart of stone, I would support that increase because various studies have shown that every dollar invested in WIC saves the public many dollars, both in the short and long term, in medical costs, health care costs that are not incurred.

A second and more important reason for supporting the addition to WIC is that it is meeting a terribly critical need among pregnant and lactating mothers, and their infants and very young children who are in a low-income ranking, and who are certified to be in personal need, many of them with associated medical problems.

I just came back a week ago from a visit to the state of Washington. One of the painful parts of that trip was to talk to WIC directors and workers in the WIC Program who told hundreds of thousands of people on the waiting list that they could not be reached by the program. Washington, like many other states, is only reaching one-third of the people who are estimated to be qualified for that program.

Let me add a personal note, if I may, Mr. Chairman. My son Richard, who is 8 years old and in the third grade, he is my adopted son. When Richard was an infant, he went on the WIC Program because he was certified by a physician to be undernourished and anemic. I want you to know that that small investment in the life of my son has made a terrific difference for him and for his future.

He is now a healthy, active, bright third grader. I know that the money that we, as a nation, put into that child is going to come back to us in countless ways. Let me also say that Richard's mother benefited indirectly from that program, although no less substantially. She was at that time among the working poor.

The fact that Richard could get on the program was a real encouragement to her, it provided an incentive for her to continue on and become a self-sustaining, productive member of society. Again, I have reason to be grateful for that because Richard's mother became my wife.

I thank you, Mr. Chairman. I know that you and others on the committee have been supportive of the WIC Program. It has shown itself to be extremely effective, arguably one of the most effective assistance programs, and one that is, just in pure economic terms, a tremendously cost-effective program.

Senator BURDICK. Do you think that WIC will ever be able to provide for the entire qualifying population?

Reverend SIMON. I don't think that you are ever going to be able to serve 100 percent of those who are eligible, but I think that you can get the program up to the point where all of those who qualify, who do want to get on, have that opportunity. That percentage, I would think, would be three-fourths, 70 or 80 percent, something like that.

Senator BURDICK. How necessary is the nutrition education component of it?

Reverend SIMON. That is an essential part of the program. I hear this again and again from both parents and from WIC workers that the nutritional educational component of the program is, first of all, very effective, but also highly appreciated, and has long-term benefits that can't be measured just in the short period that the mother and child may be on the program.

Senator BURDICK. I want to thank you, Reverend Simon, for your contribution.

Reverend SIMON. Thank you, Mr. Chairman.

[The statement follows:]

STATEMENT OF ARTHUR SIMON

Mr. Chairman, I am Arthur Simon, Executive Director of Bread for the World. Thank you for giving us the opportunity to testify today on the need for increases in appropriations for the Special Supplemental Food Program for Women, Infants and Children, known as "WIC."

Bread for the World, the national Christian citizens' lobby on hunger, has undertaken a campaign to build support for appropriations increases to expand the critically important and successful WIC program. This campaign has sparked widespread support among church members, nutrition and health organizations, and other child advocacy and anti-hunger groups.

In mid-March Members of Congress serving on appropriations and budget committees and on the authorization committees with jurisdiction over WIC introduced joint resolutions in the House and Senate (H.J.Res. 192 and S.J.Res. 99). The resolutions are the focus for letters supporting this WIC expansion campaign. The "WIC Food for Life Resolution," as it is called, states that WIC should receive funding to serve an additional 300,000 eligible women, infants and children in fiscal year 1988. An appropriation of $150 million above current services for fiscal year 1988 will be needed to allow these low-income women, infants and children to have WIC benefits next year. This is a modest increase compared with the need, since WIC now serves under 45 percent of eligible women, infants and children. An additional 300,000 WIC participants, representing about a five percent growth in caseload, is considered both manageable by administrators and politically acceptable given federal budget restraints. The joint resolutions, which are gaining cosponsors daily, call for a multi-year increase in WIC appropriations of about five percent a year for each of the next four years and indicate strong support for eventually making the program available to all low-income pregnant and breastfeeding women, babies and children under five years old whose inadequate diets have put them at nutritional risk.

For those who know the WIC program, it is inconceivable why it is not available now to all of the women, infants and children who are eligible. Among government programs WIC is arguably the most successful. WIC provides nutritious food and nutrition counselling to pregnant women, infants and young children, who are the most vulnerable to the severe, long-lasting and costly consequences of hunger and malnutrition. Not attending to the nutrition and health needs of these women, infants and children today will mean that society will bear the cost of intensive care for low-weight newborns, the mentally retarded and with other disabling problems tomorrow. In other words, we can pay a little now or pay much more later. For example, at Washington, D.C.'s Children's Hospital National Medical Center, a low-birth-weight baby averages 16 days in the neonatal intensive care unit at an average cost of $1,500 a day. This would amount to $24,000. The cost of having a pregnant woman on the WIC program averages under a total of $250.

In the February, 1987, Scientific American, Dr. J. Larry Brown of the Harvard School of Public Health describes the effects of malnutrition on this age group:

> For a pregnant woman the quality and quantity of food available is a critical factor in the healthy development of her child. When nutrition is inadequate during pregnancy, a number of dangers arise for the mother. One of them is anemia, which reflects an inadequate supply of iron for the increased needs of pregnancy. Toxemia, a complex of symptoms involving an increase in blood pressure and a swelling of tissues due to excessive retention of fluid, is a common and serious hazard of pregnancy; recent findings suggest it may reflect inadequate nutrition (particularly a lack of protein).

The growing fetus requires a diet rich in protein, vitamins and minerals as its tissues and organs develop. The infant's health may therefore be compromised by poor maternal nutrition. The risks include prematurity...and low birth weight.... Premature infants are at risk of respiratory distress and a weak immune response. Malnutrition of the mother exposes even a full-term baby to such health problems as hypoglycemia (a deficiency of sugar in the blood), hypocalcemia (a deficiency of calcuim in the blood) and polycythemia (an excess of red blood cells) as well as longer-term deficiencies in growth and development.

The hazards facing the frail newborn increase its risk of dying in infancy. Even when complex and costly technology is brought to bear, a low-birth-weight baby faces 40 times the normal likelihood of dying before it reaches its first birthday. Low birth weight is a factor in more than half of the infant deaths in the U.S. and in 75 percent of the deaths of babies less than one month old.

The potential hazards of malnutrition for a pregnant woman and her fetus can be overcome by nutritional supplements supplied to the mother during her pregnancy. When food was tightly rationed during World War II, the United Kingdom made sure that pregnant women got adequate diets, and infant mortality actually declined. In places such as Leningrad and the Netherlands, where pregnant women did not get special supplementary rations, birth weights declined and infant mortality increased.

More recent studies demonstrate the positive impact of nutritional supplementation for pregnant women. The studies examined the effect of the Special Supplemental Food Program for Women, Infants and Children (WIC), which was established by the Government in 1972. Eight such studies were made between 1976 and 1986, and all reached the conclusion that the program had resulted in better maternal health and better outcomes of pregnancy. Among the findings were a decrease of more than 20 percent in low-birth-weight babies, a reduction in late fetal deaths, fewer premature infants and fewer infant deaths.

Whatever the circumstances of an infant's gestation and birth, the child once born is at considerable risk if adequate nutrition is lacking. The human brain develops most rapidly from conception until about the age of three. During those years brain function can be impaired by nutritional deprivation. Other risks are stunting (defined as height below the fifth percentile for a given sex and age) and wasting (weight below the fifth percentile for age and height). In addition malnourished children are particularly vulnerable to lead and other environmental toxins, which can affect the brain and compound the direct effects of malnutrition on the child's intellectual development....

Recent research indicates that functional impairment may result from poor childhood

> nutrition even in the absence of overt physical harm. The studies suggest that before easily measured changes in growth appear and before any nutrition-related disease is evident, a child's body may adapt to inadequate food by reduced metabolism. The implication is that the child may show no overt signs of impairment and yet be deprived of social and cognitive experiences that advance development.

As Dr. Brown mentions, WIC has repeatedly been proven to have a major impact in reducing the incidence of low-weight births, the leading cause of infant mortality and a major risk factor in mental retardation, birth defects and learning difficulties. Non-white infants are twice as likely as white babies to die in the first year of life. Black babies are born with low weight twice as often as white babies. Black and Hispanic origin women, as well as other high risk groups such as teenage and unmarried pregnant women, have the most dramatic improvements as a result of participation in WIC.

The National WIC Evaluation also showed that WIC reduces anemia among women, infants and children and improves the likelihood that children will have a regular source of medical care and be better immunized. There are indications that WIC improves the cognitive development of infants and children. Think of what this could mean to the productivity of our future workforce.

Each child is precious in the sight of God. Each child is also a precious resource for our nation which we cannot afford to waste. Assuring a nutritionally healthy start in life is the least we can do for children in poor families. A fully funded WIC program can assure poor children this healthy start. Mr. Chairman and members of the subcommittee, we urge you to include in the fiscal year 1988 appropriations bill an additional $150 million above current services for WIC to continue our movement toward this goal.

CONCLUSION OF HEARINGS

Senator BURDICK. This concludes today's hearings, as well as the hearings for the year. The information that has been gathered will be helpful to appropriate money to the Department of Agriculture and the other related agencies.

Until further notice, the subcommittee is recessed.

[Whereupon, at 3:48 p.m., Wednesday, April 8, the hearings were concluded and the subcommittee was recessed to reconvene at the call of the Chair.]

SUBMITTED STATEMENTS AND LETTERS

[CLERK'S NOTE: The materials which follow were submitted in lieu of an appearance before the subcommittee. The subcommittee wishes to assure each of those who submitted these materials that the information will be considered to the same degree as testimony which was read or submitted at the hearings.]

STATEMENT OF HON. BROCK ADAMS, U.S. SENATOR FROM WASHINGTON

Mr. Chairman and Members of the Subcommittee:

I come before the subcommittee today to request your help in obtaining funding for a project of great significance to farmers, orchardists, cattlemen, dairy farmers, consumers, scientists and educators in the Pacific Northwest and throughout the nation.

The project is the Food-Human Nutrition Facility at Washington State University. This project was initiated by the state of Washington which appropriated $13.798 million in 1985 to fund the first phase of construction. Last year, Congress appropriated $2.0 million to be applied toward start up costs on the second phase of construction. I am requesting that the subcommittee include language appropriat~~ed~~ing the $11.079 million needed to guarantee completion of this project.

Yesterday, this subcommittee heard the testimony of Mr. Dana Herron, President of the Washington Association of Wheat Growers, who pointed out that this facility will house the Western Wheat Quality Laboratory run by the USDA Agricultural Research Service. He also explained the importance of this facility to the University's efforts to improve, through applied science, this nation's ability to produce, store and market agricultural products.

Today, I would like to stress the importance of this facility in our efforts to aid farmers in this troubled time. As you know, this nation's farm economy is in a state of crisis. In the Pacific Northwest, wheat farmers have year's supply of grain on the ground with another crop on the way. Apple orchards are in full bloom and this fall, orchardists will be hauling their crops to overflowing storage facilities. Dairy farmers are reducing their milking stock in order to alleviate the acute oversupply of milk while cattle ranches, stockyards, and packing houses are being operated substantially below capacity. To make matters worse, many of these farmers are selling their products at prices which do not cover the cost of production, much less turn a profit.

Clearly, farmers are the victims not of failure, but of success. Through hard work and ingenuity, they have increased production to a point that it has outstripped domestic demand. But farm failures and bank foreclosures need not be the rewards which farmers reap for their efforts. There are vast markets for our farm products throughout the world which remain untapped. But in order to reach these markets, we must understand the needs of foreign consumers and tailor our products to meet those needs.

The Food-Human Nutrition Facility at Washington State University is the type of integrated vehicle which can play a vital role in helping our farm products penetrate foreign markets. I would like to take a moment to describe just three of programs which will be based in the Facility.

First, the building will serve as the home for Washington's International Marketing Program for Agricultural Commodities and Trade -- commonly known as the IMPACT Center. The purpose of the Center is to harness science and technology in removing impediments to the export of agricultural products and in uncovering new or expanded opportunities for agricultural products in export markets. For example, disputes between countries over pest control, chemicals, preservation methods or additives often impede the flow of U.S. agricultural products into foreign countries. The IMPACT Center will provide the scientific research needed to find acceptable solutions to these problems. It will also serve as a resource center for dissemination of information to firms and individuals interested or involved in the export of agricultural products.

The Food-Human Nutrition Facility will also house the Western Wheat Quality Laboratory administered by the USDA-Agricultural Research Service. This program provides valuable information concerning the new genetic varieties of wheat and their milling, baking and nutritional characteristics. This information is of vital importance to our trading partners who must insure that the products they purchase can be successfully processed and sold in their countries.

Finally, the facility will serve as a center for post-harvest technology research. The shipment of farm products abroad involves complex problems associated with preservation and storage. Our success in expanding into foreign markets, particularly markets for fruits and vegetables, will depend upon our ability to preserve these products in a marketable condition until they reach the consumer. We must continue to improve our storage and preservation capabilities and seek to develop products which are susceptible to storage and shipment. Researchers at Washington State University have lead the way in post-harvest technology research but are in need of additional laboratory space in order to insure continued progress in this area of importance to international marketing.

While these are just three of the programs at Washington State University aimed at expanding the market for American agricultural products, they evidence not only the institution's deep committment to the farmers of this nation, but also the institution's insight into solving the farm crisis. I know that members of this Subcommittee share my desire to undertake steps to provide meaningful long-term relief to the farming community. I believe that this is precisely the type of project which we must encourage and I respectfully request that you include language appropriating the funds necessary to complete this project.

Brock Adams

STATEMENT OF HON. JOSEPH R. BIDEN, JR., U.S. SENATOR FROM DELAWARE

I appreciate being given the opportunity to comment on the Agriculture Appropriations bill for the 1988 fiscal year. I would like to focus my comments on several programs in the Extension Service.

As members of the Subcommittee and all members of Congress know, the Extension Service has a record of efficiency and effectiveness second to none among federal programs. The dedicated professionals in Extension have been vital in assisting agriculture through the roughest times it has seen since the Great Depression. There should be no doubt that the boom times of the 70's and the bust times of the 80's have taught all of us a lesson, and it is one that the Extension Service has taken to heart.

Extension recognizes that the American agriculture that moves into the next century will have to change to remain competitive. This will be nothing new -- the American farmer has always shown a willingness and ability to adopt innovative ideas into his operation.

Another period of change is upon American agriculture, one that sees family farms having to adjust to a tighter market, not trying to keep up with an expanding one. The practices many farmers followed, which were accepted as standard operating procedure, have been shown to be misguided in some cases and counterproductive in others. The market has forced a reckoning throughout the agricultural sector of many of its practices. Extension is in a unique position to help family farms adjust to new demands and constraints, and to target assistance and knowledge to them so they can remain a viable force in the rural economy.

The Cooperative Extension System has developed an eight-point outline of the programs it believes must be emphasized in the years ahead to restore vitality to American agriculture. I would like to highlight two of the proposals, and the benefits they will have for family farmers.

The first point of the Extension plan is to raise the competitiveness and profitability of American agriculture. There is serious debate over the direction farm policy is taking this country. But it is clear that no matter which path is followed, farmers will benefit from an emphasis on development of technologies and practices that cut production costs.

Research weighted toward increasing yields no longer squares with the needs of American farmers. The emphasis has shifted to increasing profitability through better use of fertilizers and pesticides, greater use of resources already available on farms, alternative uses for crops, or diversification in farm operations wherever possible. In combination with the 1985 Farm Bill provision directing the Department of Agriculture to focus more of its research on technology applicable to small and medium-sized farms, a program emphasizing profit margins instead of bigger yields will help those who are under the greatest financial stress.

The second program area is a new one, and one that addresses a serious long-term threat to farmers -- contamination of groundwater supplies. Scientific knowledge about groundwater contamination is still growing, but public concern about its effects is increasing at an astounding rate. Farmers have a double interest in this issue. Improper use of chemicals on the land adds to costs and cuts the productivity of their own operations as well as that of their neighbors. And once contaminants get into the groundwater they are nearly impossible to remove. We must take action now to stop the threat to a most basic of human needs -- safe drinking water.

Since the early 1970's, my home state of Delaware has been active in research on groundwater problems, and the development of solutions. Groundwater provides drinking water for two-thirds of Delaware's residents, but is a fragile resource because of the nature of the state's topography, particularly in the southern counties. Sandy soils and flat ground predominate in Southern Delaware, a combination that encourages contaminants to leach down to the water table instead of being washed overland into a stream. A high water table does not allow the state to delay in addressing this issue.

Delaware is not alone in its strong interest in groundwater protection. Over one half of our nation's population is served by groundwater. In rural areas, there is near-complete reliance -- 97 percent according to the U.S. Geological Society -- on groundwater for domestic water supplies.

It is no surprise that rural residents in growing numbers are expressing their concern about the long-term danger posed by contaminants in groundwater. The program proposed by the Cooperative Extension System comes at the right time. Good management practices on farms and throughout rural areas are in everyone's interest, whether farmers or not. Extension has to be considered the best place to start action on protection of groundwater supplies. I urge the Subcommittee to support those efforts.

Mr. Chairman, I have emphasized just two of the program changes proposed for Extension. They clearly show that Extension has an important role to play in the future of American agriculture. Special support and attention is needed for the 1988 fiscal year request as the Extension Service prepares to address the opportunity before it in setting a new course for the American farm economy.

I urge the Subcommittee to carefully consider, and endorse through its funding decisions, the new directions for agricultural research and extension.

STATEMENT OF HON. MITCH MCCONNELL, U.S. SENATOR FROM KENTUCKY

I appreciate the opportunity you've given me to make this presentation. I come before this subcommittee to request an appropriation for what I feel is a most worthy purpose.

The Food Security Act of 1985 represented a major philosophic shift in our nation's agriculture policy. With the benefit of hindsight, it is apparent that our past commodity programs contributed to, rather than prevented, the current crisis in agriculture; farmers were encouraged to plant "fencerow to fencerow" while target price and loan rate increases priced us out of world markets and short-sighted foreign policy in the form of the Russian grain embargo tagged the U.S. as an unreliable supplier of agricultural products. We were forced to make some difficult decisions when drafting the 1985 Farm Bill, but this legislation took some important steps toward solving our trade problems, allowing our country's farmers to compete worldwide. If the recent consternation displayed by several competitor nations is any indication, those steps were in the right direction.

Perhaps the most important provision made by Congress for recapturing our lost world market share was the scheduled reduction in target prices and loan rates for program commodities. In doing this we committed ourselves to ending our role as residual supplier of agricultural products to the world. In doing this, also, we dedicated ourselves to carrying out several programs designed to facilitate the development and expansion of agricultural markets abroad; export PIK, cooperator market development, short term export credit, and food assistance programs to lesser developed countries, among many others, were all elements of a broad initiative to help farmers and agribusinesses improve their ability to access foreign markets.

One provision in the Farm Bill, I believe, has great potential for helping to expand agricultural exports. Section 1419 amends the National Agricultural Research, Extension, and Teaching Policy Act of 1977 by mandating grants to States for the establishment and operation of international trade development centers. These centers would utilize various resources to "enhance the exportation of agricultural...and related products." Activities might range from making available to potential exporters information vital to conducting business in foreign countries--marketing data, transportation needs, insurance and financing opportunities--to establishing contacts within trade ministries of foreign governments. A trade center might be the sight of trade delegation meetings or a place where businessmen could go to learn about new markets. Their charge is a very broad one, and, if established, trade centers could have a broad impact on the health of American agriculture.

Last year I submitted a proposal for such a center to this subcommittee. USDA reviewed the plan and made some constructive suggestions. Those suggestions have been incorporated into the document I am submitting, and I feel our proposal is much improved. USDA is in the process of reviewing this plan, and I anticipate their enthusiastic support. In fact, our colleagues in the House requested USDA to prepare a set of guidelines for international trade development centers. Since the U.K. Center was the only proposal reviewed last year by USDA, I strongly suspect that their recommendations will reflect much of what I am submitting to you today.

Kentucky is an appropriate location for a trade center. The University of Kentucky is a respected institution of higher education. Their reputation as a leader in agricultural research and extension is well established, as is their expertise in international affairs through the outstanding program at the Patterson School of International Diplomacy.

The influence of the trade center would by no means be confined by state lines. Kentucky, in addition to its own diverse agriculture, is surrounded by some of the richest agricultural lands in the country and is accessible by many states who could derive great benefit from the trade center's activities. An agribusinessman from Mississippi or a farmer from Tennessee or students from Georgia stand to gain as much from this facility as does agriculture in the Commonwealth of Kentucky.

Utilizing these resources, the trade center at the University of Kentucky, as proposed, would carry out their mandate on three levels: research, information delivery and education. Researchers would analyze products and geographical areas which displayed potential for increased export, studying topics as wide ranging as market potential for some given product to changing patterns in exports.

Professionals at the University would link potential exporters with potential importers through presentations, lectures or trade seminars. Area businessmen could obtain technical assistance and valuable insight necessary for export development.

The trade center would provide resources for training individuals and businesses interested in the nuances of exporting; they would school these businessmen in the fundamentals of international commerce--for example, contract terms, transportation arrangements, cultural considerations, dealing with foreign trade ministries, handling foreign exchange risk, etc.. Undergraduate and graduate students interested in this discipline could take classes to learn the elements of international marketing and trade or participate in structured internships with companies involved in exporting agricultural products.

I am requesting funding of $1,600,043.55, to be matched by state and private sources, for the purpose of establishing and operating an international trade development center at the University of Kentucky. This appropriation would fund the Center for 6 years, at which time the Center would, because of its own fundraising and promotion efforts, require no further federal appropriations. I have submitted to the subcommittee a detailed report which discusses at length the mission of this trade center, its organization, its operation and a detailed 6 year budget, and outlines the Center's self-sufficiency plan.

We have here an excellent opportunity to provide much needed assistance to a financially pressed sector of our economy. The future of American agriculture is abroad and the success of our farmers and agribusinessmen will lie in their ability to adapt to the needs and demands of the world marketplace. The international trade center at the University of Kentucky will do much to strengthen agriculture in Kentucky and the Southeast and pave the way for a new era in agribusiness.

THE UNIVERSITY OF KENTUCKY INTERNATIONAL TRADE DEVELOPMENT CENTER: A PROPOSAL

This proposal was prepared by Dr. Mike Reed, Associate Professor of Agricultural Economics at the University of Kentucky, at the request of Senator Mitch McConnell and Senator Wendell Ford. Questions about the proposed International Trade Development Center at the University of Kentucky can be directed to any of the following individuals:

David Glimp	Office of Senator Mitch McConnell	224-8283
Jay Poole	Office of Senator Mitch McConnell	224-2541
Mike DiSilvestro	Office of Senator Wendell Ford	224-4343

EXECUTIVE SUMMARY

The crisis in U.S. agriculture is a crisis of many dimensions--the challenges the American farmer faces range from dealing with changing federal farm policy to finding new ways to market produce. Farmers have no influence over macroeconomic factors such as the value of the dollar, the international debt situation, and trade policies of foreign governments. However, many experts recognize that one of the major problems outside the macroeconomic sphere is the lack of marketing expertise by many agricultural producers and agribusinesses. Export market information, research, and development are key aspects overlooked by many farmers because of the size of their operation and lack of resources. Congress has taken steps to address the needs of farmers who grow crops with untapped export potential by authorizing the establishment and operation of international trade development centers to enhance agricultural exports.

This is a proposal to establish such a center at the University of Kentucky to serve farmers and agribusinesses in the Ohio Valley, the central Southeastern states, and Appalachia. Agriculture in this region is diverse and characterized by relatively smaller farming and agribusiness operations--though they have highly developed productive resources, they often lack the expertise necessary to identify and exploit new markets, especially those in foreign countries. An international trade development center would help them gain this marketing knowledge and apply it to their own businesses and take advantage of today's international market.

As proposed, the Center has three major activities: information delivery, research and education. All of these activities are oriented toward increasing export markets for U.S. agricultural products -- especially value-added commodities. The market information function of the Center will link potential exporters with potential importers through presentations, exhibits, brochures, and contacts with USDA's Foreign Agriculture Service (F.A.S.). Research activities will involve investigation of potential products and geographic areas where exports are expected to grow rapidly. The educational function of the Center will focus on training potential exporters and university students in the elements involved in successful export marketing.

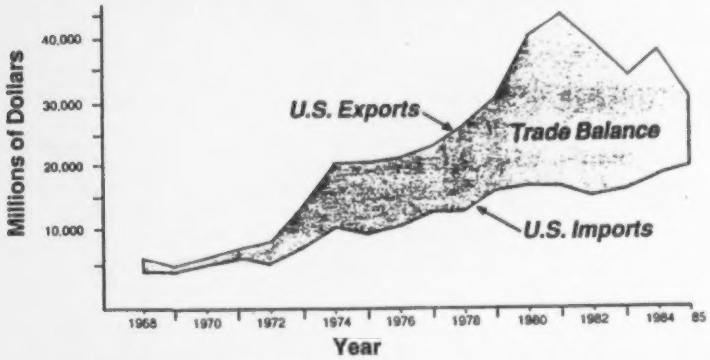
The Center will focus the expertise and resources at the University of Kentucky, other land grant universities, state governments, and agribusinesses of the region, onto their mission of developing the potential for agricultural export. The University of Kentucky has extensive academic experience in international agriculture and development, international relations, trade and business. The College of Agriculture, College of Business and Economics, and the Patterson School of Diplomacy have a reputation of excellence in their disciplines; the Center will be able to draw upon these departments and synthesize the resources at their disposal into a sound, region-wide initiative for agricultural export development.

INTRODUCTION

Background: The crisis U.S. agriculture faces in international markets is well documented. However, the true severity of the problem did not really hit home until May, 1986, when the U.S. ran its first monthly agricultural trade deficit since World War II. The May deficit was caused by a number of very short-term factors which depressed agricultural exports, but the attention it drew to agricultural export problems is not unwarranted.

The chart below shows the history of U.S. agricultural exports, imports, and trade balance since 1968. The value of exports and the trade balance were on a consistent upward trend until 1981 when they peaked at $43.7 billion and $26.6 billion, respectively. Since 1981, exports have fallen by 29 percent, while the trade balance has fallen 57 percent. These drastic reductions have occurred (and are occurring) during the time the overall U.S. merchandise trade balance has deteriorated badly. The poor state of U.S. agriculture has helped the U.S. move from the largest net creditor nation in 1979 to the largest net debtor nation in 1985.

Value of U.S. Agricultural Foreign Trade and Trade Balance



Source: Foreign Agricultural Trade of the U.S. (U.S.D.A.)

The National Commission on Agricultural Trade and Export Policy: The National Commission on Agricultural Trade and Export Policy (1986) made nine general recommendations concerning the design and conduct of U.S. agricultural trade and export policy. Most of the nine recommendations deal with implementation of a consistent, hard-nosed trade policy and organization of current governmental agencies. Three recommendations have particular relevance to this proposal. They are (1) a call for expanded efforts to strengthen U.S. competitiveness in value-added trade, (2) increased market development activities in potential high-growth Third World countries, and (3) more coordination and expansion of market development efforts at the federal, regional, and state level.

The U.S. has always been a world leader in agricultural exports, but it has historically lagged in value-added trade. In recent years only about 33 percent of our exports could be considered value-added products, versus 74 percent for France, 51 percent for Brazil, and 40 percent for Australia. The exportation of value-added products is much more beneficial to an economy because more people are employed through processing the product—though there are only 2 million full time farmers, there are over 10 million people involved in the processing of agricultural commodities. Unfortunately, value-added products are extremely difficult to export because trade restrictions are tighter and market development efforts must be more specialized.

It is imperative that U.S. market development efforts continue to increase in Third World countries, especially those with high growth potential. These countries are prime candidates for upgrading their diets to include products which are popular in the U.S. and Europe (e.g., livestock and other high-valued products). The U.S. must increase its presence in these countries to ensure that when these markets grow, U.S. agricultural producers will benefit from expanded trade.

Finally, it is necessary to strengthen and expand market development initiatives at the regional and state levels to better focus U.S.D.A. and Commerce Department efforts to expand exports on an individual operation basis. More coordination and information, for instance, should flow between F.A.S. and the regional and state levels to help F.A.S. know what producers and producer groups are capable of expanding exports and, conversely, to help farmers and agribusinessmen learn what services F.A.S. makes available to them.

Opportunities: There are a large number of agricultural products which have no well-developed, formal export system, but still have export market potential. Presently, the international flow of these commodities is not large enough for large multi-national corporations to become involved, but there are still opportunities available for smaller producers and agribusinesses with expertise in international marketing. The problem is that very few agricultural firms have the necessary business and intellectual resources for taking advantage of these export market windows--product promotion, market intelligence, knowledge of foreign contract laws, or the capacity for market potential research, for example.

The central Southeastern states, the Ohio Valley, and Appalachia produce many products with legitimate export markets (e.g., breeding stock, tobacco, distilled spirits, ginseng, timber, and white corn) which could be exploited further if international marketing expertise at the firm level were improved. Export markets for other products (e.g., ornamentals and seeds) could also be developed. A small investment in education of producers and agribusinesses, along with targeted market development efforts in strategic markets, could result in large benefits to the region in terms of increased employment, income, and exports.

International Trade Development Centers: Section 1419 of the Food Security Act of 1985 establishes a means to intensify efforts in the market development areas mentioned by the National Commission. This section calls "for the establishment and operation of international trade development centers...to enhance the exportation of agricultural and related products." Preference is to be given to land-grant universities that "operate agricultural programs; have existing international trade programs that use an interdisciplinary approach...; and have an effective and progressive communications system."

This is a proposal to establish such an international trade development center at the University of Kentucky to serve farmers and agribusinesses throughout the area. The Southeast, the Ohio Valley, and Appalachia is very reliant on a diverse agriculture and is characterized by smaller operations than are found in other parts of the country. Producers and agribusinesses have the production expertise to compete in many world markets, but they do not always have the marketing expertise. The international trade development center at the University of Kentucky would help these producers and agribusinesses establish linkages which are crucial for successful exporting, helping producers and agribusinesses compete on today's international market.

ACTIVITIES OF THE INTERNATIONAL TRADE DEVELOPMENT CENTER

The three major activities of the Center will be information delivery, research, and education. All of these activities are oriented toward increasing export markets for U.S. agricultural products -- especially value-added products. Appendix 2 of this document gives some examples of activities from each of these three areas. A more general description of activities follows.

Market Information: The market information function of the Center will link potential exporters with potential importers. This would involve presentations to agricultural producers (and marketers) on the benefits of exporting and innovative ways to overcome exporting difficulties. The Center would help design brochures and provide translation services for agriculturalists to promote their products to overseas buyers. Exhibits for trade shows and foreign delegations would generate market windows for exports. The effort would be extended to overseas trips to educate foreign buyers on a host of agricultural products which are available from the region's producers. Once exporters and importers are linked, the Center could act as a facilitator to ensure that initial transactions go smoothly.

The federal government operates a hodge-podge of export assistance programs through U.S.D.A., the Department of Commerce, Department of State, the Agency for International Development, the Small Business Administration, the Export-Import Bank, and the Overseas Private Investment Corporation. They provide services from market intelligence to sales leads to information on the reputation and payment history of foreign firms. The Center will serve to synthesize these various programs and give regional farmers and agribusinessmen access to them.

Research: The research activity will involve investigation of potential products and geographic areas where exports could increase. The research will be a combination of short-term, market opportunity-type studies and long-term market structure studies. The short-term research will investigate potential products and geographic areas which might provide opportunities for increased exports by regional producers. This research could be in response to requests by specific firms or could be more generic and broad-based. A key element in the short-term research category is that it should take less than three months to complete.

The long-run studies will investigate the factors which determine trade flows and project future trade patterns which will impact U.S. export markets. A major effort in this area would be to study the effect of macroeconomic factors, such as U.S. monetary policy (interest rates and money supply growth), on world economic activity and U.S. exports of specific agricultural products. Such research will guide producers and agribusinesses into growing markets where they can be competitive.

Education: The educational function of the Center will focus on training potential exporters and university students from throughout the region on the elements involved in successful export marketing. Education for exporters and farm leaders would come in the form of conferences which present the nuances of export marketing, such as contract terms, letters of credit, transportation arrangements, cultural considerations and foreign exchange risk. These conferences would be very basic at first, but could concentrate on more specific topics (i.e., targeting geographic areas or particular products) as the Center's audiences become more sophisticated.

The Extension Service at the University of Kentucky, and at land grant universities throughout the region, will play an integral role in the activities of the Center. The extension services in the various states will provide a means to inform farmers and agribusinesses about the available resources at the Center, and will help to generate interest in its activities. Extension will serve as a network for distributing Center publications, and a conduit for publicizing conferences and meetings. In addition, the extension services, in many cases, will serve as the Center's initial contact point with individuals wishing to export or assess export potential. It would be possible, as well, to conduct "remote" seminars with the assistance of county extension agents.

The university education program will involve teaching at least one course at the undergraduate and graduate level on international marketing of agricultural products. The Center would also work on establishing and coordinating internships for students interested in international marketing. This activity would benefit students and could provide a significant impetus for potential exporters to become involved in international markets. If enough interest is generated at the undergraduate level an International Marketing degree option could be added to the Marketing and Agricultural Economics departments.

ORGANIZATIONAL STRUCTURE OF THE INTERNATIONAL TRADE DEVELOPMENT CENTER

Advisory Board: The Advisory Board will be made up of agricultural leaders, members of the congressional delegations, and agribusinessmen and women from the various states which the Center will serve, as well as members of the academic community and government agricultural agencies. It will be their role to oversee the broad mission of the Center, giving it direction and providing informed perspectives through which the Center can better meet the region's agricultural export needs.

All positions will be for two year terms and selections will be made by an independent panel appointed by the Executive Director in the first year, and the Advisory Board Chairperson on the following years. The Executive Director will serve as a non-voting member of the board and will provide staff support for the members. The Advisory Board will meet, at a minimum, twice annually at which time they will review the activity of the Center--the research, education and marketing efforts it is making--and provide recommendations for improvement and approval of new initiatives. A committee appointed by the chair will be selected to make hiring recommendations. Similar committees can be called as necessary.

Executive Director: In addition to serving as liason to, and non-voting member of, the Advisory Board, this individual will oversee the work of the Marketing, Research and Education Coordinators. The Executive Director will maintain contact with other institutions in the region, working with colleges and universities, state governments and private groups, to identify resources which the Center can utilize and needs which the Center can address. This individual will also serve as chief development and public relations officer for the Center, and will write grant proposals to various public and private institutions. The Executive Director, a Ph.D. preferably with international trade experience, will hold professorial rank at the University of Kentucky.

One-fourth of the Executive Director's salary will be paid by the University of Kentucky; the remainder will be paid by the Center. This will provide a direct link between the trade center and the University, and reflects the fact that this individual's work will directly benefit the University--research, teaching, etc.

Marketing Coordinator: The Marketing Coordinator will have at least an M.S. or M.B.A., with experience in international transactions and preferably fluency in at least one language. He or she will draw together the resources of the various universities in the region, as well as the Foreign Agriculture Service and federal agricultural export programs, and focus them on the marketing projects the Center undertakes. This person will work directly with the trade consultants hired and will be involved directly in many of the marketing trips. The Marketing Coordinator will meet with and provide assistance to foreign trade missions visiting the United States and will coordinate trade shows held in conjunction with the Center.

Education Coordinator: An M.A., M.S. or M.B.A. will be required for this position. This individual will arrange and supervise exporting seminars held at the Center and oversee graduate and undergraduate internships which the Center sponsors. He or she will work closely with the extension services in the various states throughout the region. The Education Coordinator will also help develop international trade coursework offered at the University, providing support to faculty members and outside experts.

Research Coordinator: The Research Coordinator, a Ph.D. in agricultural economics, will work with the Executive Director in monitoring and performing short-term research for the Center. This person will work directly with research consultants hired on a short-term basis and will also oversee the work of graduate and advanced undergraduate students recruited to perform the basic tasks involved in research--locating and assembling information, as an example. In conjunction with the Executive Director, this individual will be involved in the approval of research projects.

Assistant Marketing and Assistant Research Coordinators: At years 3 and 4, respectively, Assistant Coordinators will be hired to allow the Center to expand its Marketing and Research functions. These individuals will be M.S. or M.B.A. level and will provide necessary support to the Marketing and Research Coordinators.

Administrative Assistant: The Administrative Assistant will provide secretarial, clerical and administrative support. As office manager, this person will oversee the day-to-day functioning of the Center. The Administrative Assistant will be responsible for planning the details for the conferences, seminars and trade shows held at the Center (i.e., lining up facilities, meals and equipment, etc.) This person would also be charged with the responsibility of monitoring the budget, and providing accounting skill necessary for the operation of the I.T.D.C.

Consultants: Consultants will be retained on a short-term basis, as conference speakers, interpreters, researchers, marketing specialists, or to fulfill whatever needs arise. University employees from land grant institutions throughout the region will provide a significant amount of support, and will reduce Center expenditures. Officials from the Departments of Agriculture, Commerce, State, as well as other federal agencies, will be a large pool of expertise from which the Center can draw at a relatively lower cost.

Student Assistants: Qualified Student Assistants will be employed to perform such tasks as data collection for research. Others will assist in physically setting up conferences, and provide similar staff support.

FUNDING

The Center, over the 6 years of federal involvement, will have a budget of $3,200,087.10. Section 1419 of the Food Security Act requires that all Federal funds be matched by State funds (including funds received by the State from private sources and from units of local government). It is requested that the U.S. Department of Agriculture contribute $1,600,043.55 over 6 years, to fund the international trade development center at the University of Kentucky--the Kentucky state government and private sources will match this amount.

Personnel: As previously discussed, the Center will be initially staffed by an Executive Director, three special coordinators, and an Administrative Assistant. At year 3 we have budgeted the addition of an Assistant Marketing Coordinator, and at year 4 an Assistant Research Coordinator will be added, reflecting anticipated growth in Center activities. Consultants will be utilized for various Center activities whenever additional specialized expertise is required for conducting a project. Student Assistants will provide staff support wherever needed, and have been budgeted at $4.50 per hour for 1000 hours, increasing 200 hours annually.

Three-fourths of the Executive Director's salary will be paid by the Center, and the University of Kentucky will pay the remainder. The first years's base salary will be $75,000, $56,250 paid by the Center. The Executive Director's salary, as with those of all full-time employees, is scheduled to be raised 5% annually.

The Center will provide full-time employees with a benefit package comparable to that offered by the federal government. This package will include medical and life insurance, and will cover the Center's Social Security contribution. Benefits will be 11% of total salaries paid to permanent staff.

Conferences: The conference budget assumes three one-week, three two-day, and three single-day conferences each year. It includes a charge for facilities, and hotel expenses and at least one provided meal each day for thirty participants, which is crucial when the Center is attempting to establish its value to the agricultural community. However, as the Center's program becomes more established, and as conference sponsors can be found, subsidies for meals and lodging will be reduced, and more conferences will be offered. At that time the majority of the expense for a conference (outside of speakers) would be informational material, facilities, and promotional activities.

Travel: The initial year's travel budget includes eighteen one-week trips to overseas destinations (estimated at $48,000) and $12,000 in domestic travel. The overseas trips will be for market development and market assessment purposes and will involve meetings with F.A.S. personnel and local government and business people. Most of these trips will be made by the Executive and Marketing Director. The travel budget is scheduled to increase aggressively as marketing efforts grow.

Office Space: The College of Agriculture at U.K. has offered to donate office space for the Center, and therefore this item was excluded from the budget.

Telephone and Telex: The phone system will cost, for the initial year, $4150, plus $350 in installation charges. Two long distance lines, one incoming and one outgoing, will cost $10,800 the first year. Telephone costs are budgeted to increase 3% per year to allow for greater usage and moderate rate increases. Access to a public Telex service will cost $660 the first year: $60 per year in subscription fees and $50 per month in usage. Similarly, these costs are budgeted to increase at 3% per year.

Special Media: Videotaping, computer graphics, and other special media needs are budgeted at $3000 for year 1, and will increase annually. Many of these needs will be met by utilizing University of Kentucky resources, decreasing budget levels for these items.

Office Supplies: Office supplies are budgeted at 5% of total expenditures. Year 1 includes an additional $25,000 for start-up costs. Years 3 and 4 include an additional $1,000 each year to cover expenses generated in accomodating new personnel.

Printing: $15,000 is budgeted for printing the first year, and will increase 50% over the 6 year period as the activities of the Center grow.

Postage: Postage estimates are based upon 30,000 pieces of mail during the first year, increasing by 2500 pieces each successive year. $500 annually has been budgeted for overnight mail services.

SELF SUFFICIENCY PLAN

The Center will become self-sufficient by the end of the 6 year period of federal involvement. This will be accomplished by raising seed money, soliciting sponsors, and by instituting user fees.

The Executive Director will serve as chief development officer for the Center. He or she will identify foundations and organizations which can be approached for grants to support the Center's activities, and will coordinate grant proposals. State governments from the Center's constituency will be targeted, as well, for contributions to an endowment fund. This fund will be separate and distinct from the matching funds provided to meet the federal contribution to the Center.

Each of the Coordinators will work to solicit sponsors for their activities. For example, a conference on exporting lumber could be subsidized jointly by the Center and a trade association involved in this activity. By the end of the second year, user fees will begin to be phased in for services such as short-term, market-oriented research, for conferences, and for other appropriate activities. It is not the intent that these user fees become prohibitive or limit the clientele of the Center.

QUALIFICATIONS AND EXPERIENCE OF THE UNIVERSITY OF KENTUCKY

There is substantial expertise at the University of Kentucky in the areas of international affairs, trade and business. The College of Agriculture has a faculty with a world-wide reputation in international development and trade through overseas projects and graduate education. The College has had multimillion dollar agricultural projects in the Dominican Republic, Indonesia, and Thailand, along with substantial experience in several other countries throughout the world.

The College of Agriculture's Extension Service is well-known among farmers and agribusinesses throughout the region for its positive impacts on their operations. As previously discussed, the Extension Service provides another vehicle to provide information to farmers and agribusinesses concerning export opportunities. Initial contacts made by extension personnel will be instrumental in the success of the Center. U.K.'s extension service has a solid track record of positive involvement in Kentucky agriculture and will be able to cooperate effectively with other states' extension programs.

The College of Business and Economics offers special assistance to businesses through its Management Center, the Center for Business and Economic Research, and the Small Business Development Center. The latter center includes a special grant from the Economic Development Administration (Department of Commerce) on small business exporting. The Small Business Development Center holds conferences and seminars on many of the topics mentioned in this proposal. However, it does not cater to farmers or agribusinesses because the E.D.A. grant does not call for assistance to those groups. An international trade development center (focusing on agricultural producers and agribusinesses) at U.K. would complement many of the programs these centers are sponsoring for small businesses.

Section 1419 of the farm bill specifies that trade centers should have access to an "effective and progressive communication system that might be linked on an international basis to conduct conferences or trade negotiations". The University of Kentucky has extensive telecommunications facilities, including two of its own C-Band satellite reception disks. Within a year it will have a Ku-Band uplink and downlink facility. With these satellites, U.K. will have the capability of sending and receiving signals to and from anywhere in the world. Several departments at the University are involved in providing teleconference short-courses and seminars. The University has experienced personnel capable of producing, transmitting, and receiving teleconferences, which the Center could utilize in its educational activities and in conducting trade negotiations. The University also has an instructional television classroom, and plans to build two more in the near future. These classrooms, equipped with several cameras as well as audio equipment, will give the Center the ability to tape or transmit live a class or conference. In addition to these resources, the facilities of Kentucky Educational Television Network are on U.K.'s campus and will add to the Center's telecommunication's capabilities.

The University has a broad-based curriculum which is essential for undergraduate and graduate education in international business. The list of courses from agricultural economics, economics, management, diplomacy, political science, communications, anthropology/sociology, and geography is included in Appendix 4. In addition to the courses listed, there are a host of courses in anthropology, geography and political science departments on regionally specific aspects of their respective disciplines. There are also extensive offerings in the following foreign languages: Arabic, French, German, Greek, Hebrew, Italian, Russian, Spanish and Swedish. The marketing department will soon offer a two-course sequence in international marketing, taught by a visiting professor through a Department of Education grant.

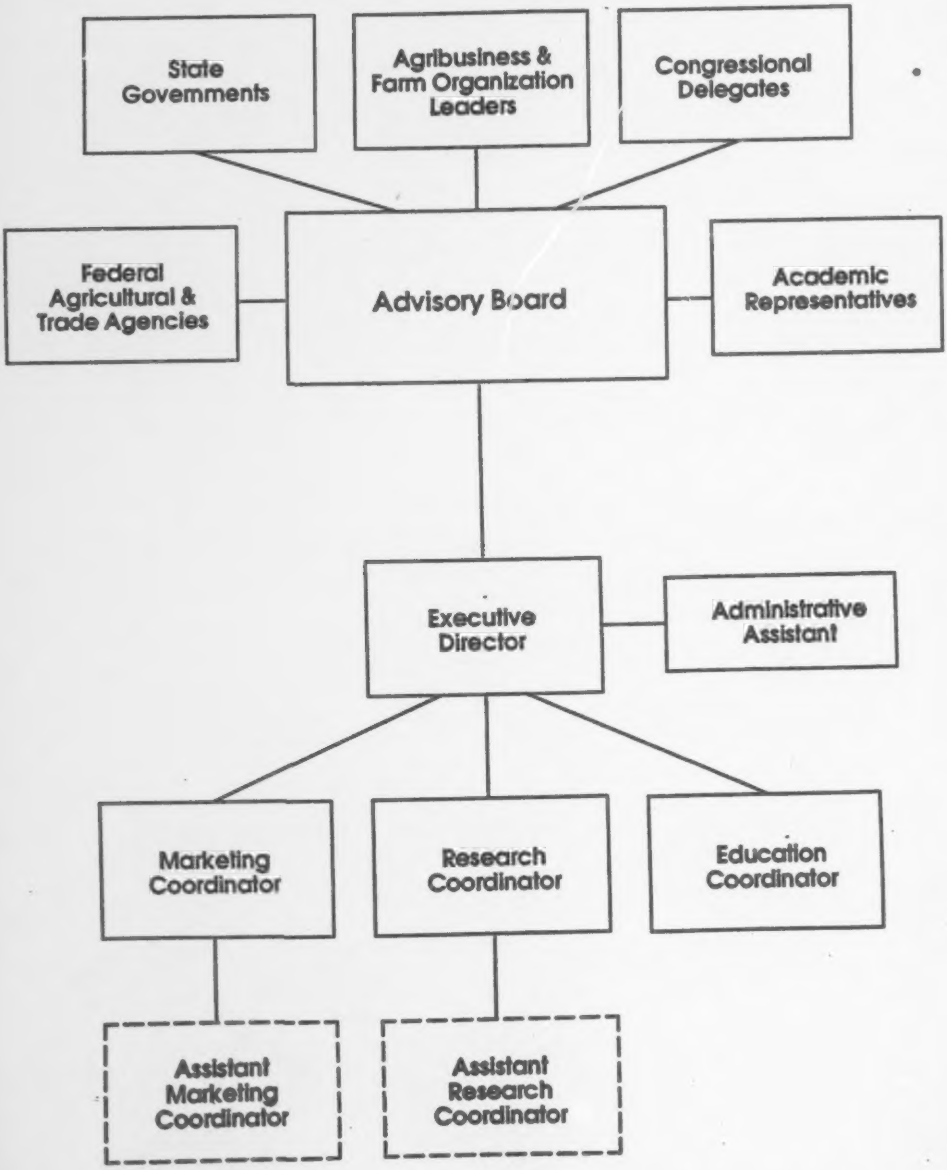
The Patterson School of Diplomacy has an international reputation for training students for careers in international organizations, U.S. government agencies in foreign affairs, and international development activities. This is a master's level program which takes advantage of the University's tremendous expertise in the international arena. Alumni from the Patterson School would provide invaluable contacts for market development and research activities.

A major asset of the University of Kentucky is its location--Lexington has become recognized as a growing center for international commerce. The horse and tobacco industries have attracted individuals and businesses from around the world for years. Businesses and financial institutions with worldwide networks have branches in Lexington, and the Center will be able to draw on their resources in establishing initial contact in countries around the world. In addition, Toyota corporation has recently begun the construction of an automobile assembly plant near Lexington; several international support companies have begun to locate in the area, as well. Toyota, and the international companies in the region with which it does business, will be a further asset to the Center.

Lexington's convention facilities are extensive. There are 6 "four star" locations (Marriott, Hyatt Regency, etc...) in addition to those provided by the University. Lexington has its own full service airport, and is convenient to Greater Cincinnati Airport in northern Kentucky, which has recently added flights to London. Lexington is located at the crossroads of the two major interstate highways that bisect Kentucky, making it accessible to all of the Center's client states.

Appendix 1

Organizational Chart
U.K. International Trade Development Center


State Governments
Agribusiness & Farm Organization Leaders
Congressional Delegates
Federal Agricultural & Trade Agencies
Advisory Board
Academic Representatives
Executive Director
Administrative Assistant
Marketing Coordinator
Research Coordinator
Education Coordinator
Assistant Marketing Coordinator
Assistant Research Coordinator

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APPENDIX 2

PROPOSED PROJECTS INDICATIVE OF THE CENTER'S MISSION

Conference Content Indicative Of The Education Function Of The Trade Center

The following schedule is a tentative outline of the type of conference/workshop which will be held to help educate producers and agribusinesses on what is involved in exporting. This particular conference is planned for one day, with other follow-up conferences to follow with greater detail on each session. It includes speakers from F.A.S., a commercial bank, and the Center.

Session 1: Promoting Agricultural Products in Overseas Markets

cultural considerations
personal visits
trade shows
brochures
Agricultural Attaches (from the Foreign Agricultural Service)

Session 2: Sales Arrangements

terms (cif, cf, fob, fac)
tenders
contracts
countertrade

Session 3: Documentation Requirements

manifest/invoices
bills of lading
inspection certificates (i.e., health inspections)
export licenses
customs clearance

Session 4: Financing and Credit Terms

bills of exchange
letters of credit
export loans
foreign exchange risk reduction

Session 5: Other Marketing Functions

grading and packaging
insurance
shipping
freight forwarders

Information Packet For Livestock Exporters

There have been a number of livestock producers in recent years who have expressed an interest in exporting various classes of livestock for breeding purposes. Since the requirements for such exports are fairly strict at the U.S. border and the importation port, many potential suppliers have been discouraged from these high value-added exports.

The Trade Development Center at the University of Kentucky will publish an information packet which prospective livestock exporters can use to become familiar with the procedures which must be followed in exporting. The Center will tailor these materials to livestock producers in the region to give information that is very region-specific: embarkation points, shrink percentages and finishing requirements, local financing arrangements, and local firms which could improve producer's marketing plan, for example.

The content of the packet will be a summary of the considerations outlined by the general conference, which is outlined on the previous page, with specific elements for livestock. Such a packet would make use of a number of USDA materials, as well.

Example Of a Market Development Trip to Promote White Corn Exports

The Southeast region of the United States produces a significant portion of the white corn grown in the United States. White corn has a very limited market in the U.S., but has sizeable overseas markets (i.e., Latin America and Africa). White corn is usually ground into meal and served as grits and dog food (in the U.S.), tortillas (in Latin America), or biscuits (in almost all countries). The leading exporters of white corn are the U.S. and countries in Southern Africa (Zimbabwe and the Republic of South Africa).

The countries which compete with the U.S. in white corn markets are typically plagued with production problems (due to the ten year drought cycle in Southern Africa) and political problems. They are very unreliable suppliers. However, the U.S. has not been able to capitalize on the instability of these competitors because of its own production instability.

U.S. white corn prices are extremely sensitive to production variations because foreign markets have not been nurtured. If formal arrangements can be made with potential foreign customers, more stability could result. There are real possibilities for substantial increases in export volume if contractual arrangements can be made with these foreign countries. However, these contracts have not come to fruition because of current small scale production and marketing.

The market development specialist from the Trade Development Center will travel to selected Latin American countries (probably Mexico and Venezuela), along with representatives of U.S. firms currently marketing white corn, to investigate the possibility of establishing more formal relations between U.S. agribusinesses and importing agencies in these Latin American countries. The representative from the Trade Development Center will work with local embassy officials and F.A.S. representatives. He or she will be heavily involved in working out the details of the agreements and would explore possibilities for countertrade (lining up firms which will also import items from these Latin American countries, since foreign exchange earnings are critical due to debt problems).

Example of a Short-term Research Project on Dairy Breeding Stock

The owner of a genetic-transfer operation is interested in selling embryos from a registered dairy herd to an Asian country. However, a number of obstacles have surfaced concerning legal, economic, sanitary and other requirements which make exportation to the country impossible. The Center would contact U.S. government agencies (e.g., F.A.S., the Dept. of Commerce) which could help clarify the regulations and investigate whether the potential exporter could change its exporting procedures to make exportation feasible.

Dairy farmers or organizations which have exported embryos to other nearby Asian countries would be contacted for their insights into measures the potential exporter could take to make the regulations less troublesome. It is possible that the Asian country's regulations are antiquated and have not kept pace with modern technologies used in animal husbandry and veterinary medicine. In this case, some simple negotiations between the country and the U.S.D.A. could remedy the problems.

If the regulations are found to be unduly restrictive and the Asian country is unwilling to reduce the trade barriers, further research at the Center could be performed with U.S.D.A. cooperation concerning the potential benefits of opening dairy embryo exports to the country. If the benefits are significant, the U.S.D.A. and the U.S. Trade Representative may be willing to assume a more active role in its negotiations with the Asian country.

The key element, though, is that the U.S. government must know the potential benefits of trade liberalization before it is willing to push for reforms. Unfortunately, U.S.D.A. (Economic Research Service or F.A.S.) do not have the resources nor the mandate to perform such targeted research on a country-specific, situational basis.

APPENDIX 3

ESTIMATED ANNUAL BUDGET

PERSONNEL	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Executive Director (.75 * base)	$56,250.00	$59,062.50	$62,015.62	$65,116.41	$68,372.23	$71,790.84
Marketing Coordinator	50,000.00	52,500.00	55,125.00	57,881.25	60,775.31	63,814.08
Education Coordinator	30,000.00	31,500.00	33,075.00	34,728.75	36,465.19	38,288.45
Research Coordinator	40,000.00	42,000.00	44,100.00	46,305.00	48,620.25	51,051.26
Assistant Marketing Coordinator	0.00	0.00	30,000.00	31,500.00	33,075.00	34,728.75
Assistant Research Coordinator	0.00	0.00	0.00	30,000.00	31,500.00	33,075.00
Administrative Assistant	25,000.00	26,250.00	27,562.50	28,940.62	30,387.66	31,907.04
Consultants	10,000.00	15,000.00	17,500.00	20,000.00	22,500.00	25,000.00
Student Assistants	4,500.00	5,400.00	6,300.00	7,200.00	8,100.00	9,000.00
Benefits to Salaried Employees	22,137.50	23,244.37	27,706.59	32,391.92	34,011.52	35,712.10
Total Personnel	$237,887.50	$254,956.87	$303,384.72	$354,063.95	$373,807.15	$394,367.51
OPERATING EXPENSES						
Office Space	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Conferences	60,000.00	60,000.00	60,000.00	60,000.00	60,000.00	60,000.00
Travel	60,000.00	65,000.00	75,000.00	80,000.00	85,000.00	90,000.00
Telephone and Telex	15,960.00	16,078.00	16,560.00	17,057.00	17,569.00	18,096.00
Office Supplies	44,947.37	21,178.74	25,246.24	28,177.05	28,561.81	29,988.18
Special Media	3,000.00	3,500.00	4,000.00	4,500.00	5,000.00	5,500.00
Printing	15,000.00	16,500.00	18,000.00	19,500.00	21,000.00	22,500.00
Postage	7,100.00	7,540.00	7,980.00	8,420.00	8,860.00	9,300.00
Total Operating Expenses	$206,007.38	$189,796.74	$206,786.24	$217,654.05	$225,990.81	$235,384.18
Total Annual Expenses	$443,894.88	$444,753.62	$510,170.95	$571,718.00	$599,797.96	$629,751.69
Annual Federal Contribution	**$221,947.44**	**$222,376.81**	**$255,085.48**	**$285,859.00**	**$299,898.98**	**$314,875.84**
Total 6 Year Budget	**$3,200,087.10**					
Total Federal Contribution	**$1,600,043.55**					

APPENDIX 4

Courses at the University of Kentucky Relevant to International Marketing and Trade

Agricultural Economics

AEC 309 - International Agriculture World Food Needs and U.S. Trade in Agricultural Products
AEC 322 - Agribusiness Management
AEC 532 - Agricultural Policy
AEC 533 - Distributional Management in Agribusiness
AEC 640 - Advanced Agricultural Policy
AEC 610 - International Trade in Agricultural Products
AEC 626 - Agriculture and Economic Development

Economics

ECO 465 - Comparative Economic Systems
ECO 466 - Seminar in Comparative Systems
ECO 470 - International Economic Policy
ECO 471 - International Economics
ECO 472 - Seminar in International Economics
ECO 473 - Economic Development
ECO 474 - Seminar in Economic Development
ECO 493 - Social and Cultural Determinants of Economic Growth and Development
ECO 670 - Economics of International Financial Institutions
ECO 671 - International Economics Seminar
ECO 673 - Seminar in Economic Development
ECO 771 - International Economics Seminar II
ECO 773 - Seminar in Economic Development II

Management

MGT 408 - World Business
MGT 508 - International Commercial Policy
MGT 608 - Comparative International Management

Diplomacy

DIP 777 - Research Problems in International Relations
DIP 795 - Special Problems in Diplomacy and International Commerce

Political Sciences

PS 210 - Comparative Politics and Political Development
PS 235 - World Politics
PS 430 - The Conduct of American Foreign Relations
PS 433 - Politics of International Economic Relations
PS 436 - International Organization
PS 437 - Dynamics of International Law
PS 439 - Contemporary International Problems
PS 532 - Comparative Foreign Policies
PS 674 - Seminar in Theories of International Politics
PS 777 - Research Problems in International Relations

Communications

COM 319 - World Media Systems
COM 519 - International and Intercultural Communication

Anthropology/Sociology

ANT 221 - Technology, Environment and Culture
ANT 251 - Culture and the Individual
ANT 253 - Societies Around the World
ANT 354 - The Family in Cross Cultural Perspective
ANT 512 - Comparative Civilizations
ANT 538 - Economic Anthropology
ANT 637 - Socio-Cultural Dimensions of Economic Development
ANT 640 - Science, Agriculture and Development
SOC 561 - Comparative Sociology

Geography

GEO 352 - Geography of the Third World
GEO 355 - Economic Geography

APPENDIX 5

RESPONSE TO U.S.D.A. COMMENTS

1. No mention of courses which constitute the current curricula in any of the relevant departments -- The revised proposal includes a list of courses from all relevant departments and explains how the Center will integrate them into new international agricultural marketing course offerings.

2. There is no mention of the supporting role of the Economics and Business Departments in the Center's activities -- The revised proposal identifies and discusses the current status of similar programs on campus that the Center will utilize and help expand. These other organizations are anxious to cooperate with the Center because they realize it will provide additional funds for them (through use of their expertise) and broaden their public exposure and client base.

3. No mention is made of how the Center will use the services of the U.S.D.A.'s Foreign Agricultural Service and the Department of Commerce's International Trade Development staffs -- The revised proposal does sketch out the relationship between Center personnel and the appropriate federal agencies. It is envisioned that these roles will be highly complementary; the Center will provide a link to farmers and agribusinesses so that the promotion work done by F.A.S., and other government agencies involved in exporting, can be directed more efficiently. The market development efforts of the Center will focus on certain commodities and regions of the world with the help of the appropriate F.A.S., Commerce, A.I.D., State or other department's staff.

4. Much of the research and analysis would be done by graduate students who do not understand the complexities of international business and trade -- Most of the research work must be done by the Research Coordinator, Executive Director or qualified consultants, otherwise, as the reviewer states, much of the complexities of international commerce will be overlooked. However, graduate students can perform many of the basic tasks required of such research, such as locating and assembling information.

5. The size of the proposed staff is not sufficient to support a full-time Executive Director -- The Executive Director has been changed to a three-quarter time position. However, the E.D. will essentially be a full-time position. Even though (initially) the Center will have only 4 full-time staff members, the number of temporary employees could be substantial at times. The E.D. does have responsibilities for supervising long-term research (and will also help with short-term projects) and for writing grants. Furthermore, the E.D. will be the primary spokesperson for the Center in the U.S. and abroad.

6. The salary of the Marketing Director is not adequate to hire a professional with the necessary expertise in international trade, business trade practices, and trade law and regulation needed -- The salary for the Marketing Coordinator has been raised to $50,000, but one must remember that this person will not likely be an expert in international business laws and regulations. Such an expert could command a six-figure salary from large corporations. Rather, this person will be able to communicate well with people from many cultures and understand many of the rudiments of international business laws and regulations. It is more important that the individual know where to turn when situations call for high-level technical expertise.

7. The federal share being requested is for an endowment. It might be more appropriate to pay these costs for 5 to 7 years -- The revised proposal calls for six years of Federal funding, rather than an endowment.

STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION

The American Farm Bureau Federation is the nation's largest general farm organization with a membership of over 3.5 million families in 49 states and Puerto Rico. Farm Bureau members produce almost every type of commodity grown commercially in this country. Our policy is developed by the producer members at the county, state and national levels of the organization. The recommendations of Farm Bureau's Commodity Advisory Committees supplement Farm Bureau policy and, in part, form the basis for our position on funding levels for specific USDA programs.

Farmers and ranchers continue to find themselves in economic difficulty. Agriculture remains in a severe adjustment period due in part to excess supplies of most farm commodities caused by weakened domestic and world demand and protectionist positions taken by some of our trading partners. Export values continue to decline and are expected to decrease from $26.3 billion in FY 1986 to $26 billion in FY 1987, down from an all-time high in FY 1981 of $44 billion. However, volume is up slightly from 109.6 million tons to 114 million tons in 1987 due to the decrease in the value of the dollar and because the adjusted loan levels in the 1985 farm bill are beginning to make U.S. commodities more competitive in world markets. Overall soft domestic and export demand coupled with agricultural credit problems make it incumbent upon Congress to provide adequate USDA funding in 1988 and for USDA to implement the Food Security Act of 1985 to address agriculture's short- and long-term market and income needs.

Overview of Farm Bureau's Budget Policy

Farm Bureau continues to support the concept of Gramm-Rudman-Hollings (G-R-H) budget law and holds fast to the belief that deficit reduction must be accomplished through spending cuts rather than tax increases or a freeze in scheduled tax reductions. Increased taxes should be avoided because they increase our cost of doing business and stifle the economy. A strong domestic, as well as international economy, is essential to the expansion of agriculture's markets. Moreover, we are concerned that increased tax revenues would generate more pressure to create new spending programs at a time when we cannot afford the ones that we have.

In short, farmers and ranchers advocate across-the-board budget cuts which apply equally to all programs and agencies, including defense and entitlement programs like Social Security.

Overview of the FY 1988 USDA Budget

Agriculture has been forced to undertake critical self-examination because of increased levels of farm program spending. There is little question that agriculture must bear a portion of proportionate spending cuts along with every other program in the federal budget. Obviously, the controversy arises when specific recommendations are made as to where to cut within each agency. It is difficult to establish the priorities as to where agricultural spending cuts should be made, but we can advise against adoption of several farm program modifications proposed by the Administration budget. While they may initially appear to be attractive from a budget standpoint, the proposals will damage agriculture in the long run and possibly move us down the even more expensive road toward mandatory production controls.

The Administration's FY 1988 budget proposed to modify existing farm programs by instituting decoupling (which itself is difficult to define), enacting zero planting options, modifying payment limitation provisions, and reducing target prices ten percent per year. Farm Bureau is opposed to these proposals as well as to changes in the sugar program.

Our message to you is that the 1985 farm bill should remain intact. We acknowledge that the 1985 farm bill is not perfect and that its initial three-year cost will be significantly over budget. Despite these problems it is beginning to achieve the goals of export enhancement, voluntary stocks reduction, and income support as agriculture moves toward a market orientation. The zero planting options or decoupling plans that have been proposed by the Administration and by some in Congress as ways to reduce farm program costs would destroy the 1985 farm bill just as it is beginning to work.

The FY 1988 USDA budget also proposes a number of new or increased user fees. Farm Bureau policy supports the imposition of user fees if principal benefits of the program accrue to the producer. We oppose the imposition of user fees on producers who are required to comply with federally mandated programs which provide primary benefits to consumers or the general public.

We recognize that our comments have been general in nature, but we will conclude by restating our two principal points: (1) The 1985 farm bill must remain intact, and (2) Every function in the federal budget, including defense and entitlements, must be subjected to cuts so that discretionary spending such as many USDA programs are not bearing a disproportionate share of spending cuts.

Thank you for your consideration of our comments.

STATEMENT OF GLENN GIBSON, PRESIDENT, AMERICAN HONEY PRODUCERS ASSOCIATION

I am Glenn Gibson, President of the American Honey Producers Association, a nation-wide organization of honey producers and/or beekeepers. We have members in forty states. Our group is the only nation-wide honey industry organization where voting privileges are limited to producers only. Non-producers are welcome as members, but they are not permitted to vote.

We appreciate this opportunity to make recommendations for funding our several programs.

DATA UPDATING STUDY NEEDED

Last spring we filed a statement with your committee asking that the USDA conduct an extensive study that would revise and update statistical data relative to honey production, pollination, imports, etc. The report that was attached to the appropriations bills recommended the study and the Department of Agriculture agreed that the study should be made, but a shortage of funds has delayed the process. The section of 1986 statement relating to the study follows:

> WE suggest that the Department examine ongoing projects and seriously consider a study that would revise and update all statistical data relative to honey production, pollination (paid-free to wildlife, agriculture, home gardens and orchards), imports, etc.
>
> The need for better data has been brought forcibly to our attention these last 4 years when a mountain of misinformation was circulated up and down the halls of Congress. As a result of this, a number in Congress view the beekeeper as a subsidy hog who will be plagued with Africanized bees sometime in the near future. The recent report of the General Accounting Office on the Honey Price Support Program is a good example of an agency's attempt to make a factual and coherent report with a scantly source of data. Fortunately for us, members of the Committees on Agriculture understood our problem. Commenting on the GAO report Congressman Kika De La Garza told the House:

> "Yes, I have read the GAO report. It is not as factual as it could be. It deals in a vacuum. I found arguments that I could challenge in some areas of the GAO report...."
>
> Congressional Record 10/7/85.

This study would clear up the pollination story and accurately establish the value of our industry to other segments of agriculture and the environment.

FEDERAL EXTENSION APIARIST NEEEDED

A great deal of technical information about all segments of our industry is available for publication but most of it is gathering dust since we do not have the services of a Federal extension program. As a result of this, we have been subjected to a great deal of misinformation in the press. A number of our leaders feel that the biggest problem with Africanized bees in this country will originate in the press. As it stands now, members of Congress and journalists have no readily available source of information.

We feel that our needs can be met by a part-time extension position with an established state level extension apiarist.

THE AFRICANIZED BEE BARRIER

One of the main topics covered at our recent convention in Corpus Christi, Texas was Africanized bees and the Department of Agriculture's recommendation for a bee barrier in Lower Mexico. Even though the subject was thoroughly covered by industry leaders and technical scientists (both USDA and Land Grant), we could not get a consensus -- either for or against. Consequently, we took no position.

OUR RECOMMENDATIONS

1. Approve a new research project that would update the industry's statistics.
2. Allot funds for an Extension Apiarist.
3. Mexican Bee Barrier -- no recommendation.

Please give these items your serious consideration.

Respectfully Submitted
Glenn Gibson, President
Minco, Oklahoma 73059
Phone 405-352-4126

STATEMENT OF CHARLES R. HARRIS, EXECUTIVE DIRECTOR, AMERICAN MUSHROOM INSTITUTE

Mr. Chairman, first of all I would like to thank you and members of the Subcommittee on Rural Development, Agriculture, and Related Agencies for this opportunity to present testimony on behalf of the nation's mushroom growers - many of whom are small independent growers and have what is best described as closely held family farms. Mushroom farms are located in twenty-five states of our Nation.

The American Mushroom Institute is a national trade association representing the growers, shippers, buyers and brokers of the mushrooms produced in the United States.

The total United States mushroom production was 588 million pounds during the 1985-86 marketing season.* However, production during the marketing year ending June 30, 1986 was the second highest on record and 5 percent higher than the 1983-84 season. The Eastern States accounted for 57 percent of the U.S. total production; Central States 13 percent and Western States 30%.

Cultivated mushrooms represent the fourth largest horticultural crop grown in the United States.** The dollar value records reads as follows:

Potatoes	$2,032,120,000.
Tomatoes	1,228,960,000.
Lettuce	679,264,000.
MUSHROOMS	486,000,000.
Onions	423,831,000.
Cauliflower	415,000,000.
Sweet Corn	367,000,000.
Carrots	249,108,000.

Today fresh mushrooms represent the 6th (sixth) fastest selling vegetable in the produce department in supermarkets.***

The cultivation of fresh mushrooms is a big business in this country and should command a larger share of the research dollar for the United States Department of Agriculture. This is particularly true since imports from various countries have decimated the processed market and more than 73 percent of mushrooms grown in the United States in 1985-86 are for the fresh market and 27 percent go to the processed market. In the last decade, the preceding percentages were almost reversed.

The American mushroom industry has financially supported numerous research projects for the benefit of the industry and consumers alike. **Among recent** research supported are the following:

- challenge studies on sulfite sensitivity (University of Wisconsin)
- post-harvest handling studies (Pennsylvania State University)

In addition, proprietary studies by a few large agri-businesses have been conducted.

Due to the severely limited resources of the domestic industry for research, virtually all of the recent initiatives have been for applied projects. For example, to increase consumption the domestic mushroom industry established a national marketing organization for promotion of the domestic product, and AMI initiated a regional effort this year aimed at consumers in the mid-Atlantic and Northeast states.

AMI respectfully seeks $300,000 in additional federal support for basic research activities within the Agricultural Research Service of the U. S. Department of Agriculture (USDA).

There are two primary research needs of the industry. The first is to gain an understanding of the fruiting mechanism of the mushroom. This is due to the necessity to produce yields at the most opportune times for market, since fresh mushrooms are highly perishable. Congress, in the past, has approved limited funding for studies in this area at USDA's Eastern Regional Research Center, Philadelphia, PA.

The second research need is genetic engineering of the commodity. This is needed to extend shelf-life, help improve the marketability, disease-resistance and quality of the product.

In closing, AMI sincerely believes that the $300,000 in additional funds sought for fiscal year 1988 would be a prudent and wise investment of tax dollars for the benefit of the domestic mushroom industry and the American consumer.

Thank you.

*1985-86 Crop Report, Agricultural Statistics Board,
National Agriculture Statistics Service, U.S.D.A,
Washington, DC, August 13, 1986.

**Agricultural Statistics 1985, United States Department of Agriculture,
U.S. Government Printing Office, Washington, DC.

*** A Produce Association Guide - The Fresh Revolution Marches On
Produce Marketing Association, Newark Delaware, 1986

STATEMENT OF THE AMERICAN SOCIETY FOR MICROBIOLOGY

The American Society for Microbiology (ASM) wishes to submit for your consideration the following comments on the Fiscal Year (FY) 1988 basic research budget for the U.S. Department of Agriculture (USDA).

The ASM is the largest single biological life science organization in the world with an active membership of over 35,000. Many of these individuals are engaged in agricultural research and are recipients of awards administered by the USDA. Our comments are directed primarily to the Competitive Research Grants program and the initiative in biotechnology within the Agricultural Research Service (ARS), increased support for training and the Administration's proposed budget for the animal welfare inspection program in the Animal and Plant Health Inspection Service (APHIS) of the USDA.

The ASM is encouraged by the USDA's initiative in biotechnology within the Competitive Research Grants program and the ARS. We believe that the direction the Agency is taking will benefit agriculture in the United States and will aid in maintaining the preeminent position the U.S. enjoys on a global basis. The progress that has been made in this relatively new program is especially encouraging and should receive continued support. However, there is an area within the competitive grants program that is lacking.

The ASM strongly recommends that Competitive Research Grants be funded at a total budget level of $59.3 million. This would include, as a minimum, $5 million of new monies for the Competitive Grants budget for biotechnology (microbiology) research on Commodity Conversion to develop new food and non-food uses for surplus agricultural commodities. It seems especially ironic that no competitive grants monies are targeted to relieve the farm surpluses in a year in which the Federal support of farm programs was estimated by **TIME** magazine (July 21, 1986) to increase by 36% to $24 billion. Also, the prospect of increased yields through agricultural research coupled with the prospect of a shrinking world market for farm commodities due to the self-sufficiency of dozens of countries who were previously dependent on imports, mandate that a strong biotechnology research initiative be implemented to create new markets for surplus Commodities.

The ASM is aware that the ARS has an inhouse program in this area and that the DOE also sponsors research in one facet of the problem on conversion of foodstuffs to energy. We believe, however, that these programs are not adequate to meet the magnitude and challenges of the problem and that they should be broad based and cover the whole spectrum of utilizing farm surplus commodities. Therefore, the ASM believes that a utilization research initiative within the Competitive Grants program that was based on utilizing new approaches and technology would generate more ideas from the private, public and land grant institutions that would meet the challenges of the farm surplus problem more expeditiously. This type of program should complement and not replace the existing programs.

The value of the Competitive Grants approach to a specific problem has been more than adequately demonstrated by the progress made in a relatively short time in the alcohol fuel program. In our opinion, research related to agriculture is as essential to the economic and social well-being of the United States as other areas of research which have consistently received strong federal support, namely defense and health.

The USDA has consistently lagged behind other agencies in funding research. A large number of worthwhile projects are not being funded. The proposals that are funded are at a comparatively low level. Research in biotechnology and the biological sciences is costly. It demands well-trained scientists, support personnel to utilize the time of these scientists efficiently, expendable items and expensive state-of-the-art instrumentation. Basic research with eventual application to agriculture costs the same on a per project basis as research performed on biological systems when applied to health (National Institutes of Health) or fundamental biological science (National Science Foundation). During FY 1986, the last year for which data are available, a USDA-funded scientist, was expected to perform research in the area of agriculture with an award that averaged $49,000 per year (Table 1 and Table 2). A history of the funding practices within the USDA for the past eight years is described in Table 2. The USDA continues to lag behind other federal agencies in its annual award rate (Table 1). In comparison, grants awarded in 1986 by the National Science Foundation (NSF) averaged $70,300 per year and grants awarded by the National Institutes of Health (NIH) averaged $149,800 per year (Table 1).

The ASM is deeply concerned by the paucity of funds in the Competitive Grants program, $44.3 million dollars. The level precludes the funding of a large number of worthwhile research proposals. Only 11% of the funds requested in the Competitive Research Grants Program was funded by the Congress in FY 1986 (Table 2). Also, the percentage of total proposals resulting in grants was only 23.3% in FY 1986. If the USDA funding levels are compared to the NSF (39.9%) and NIH (33%) levels (Table 1), it is obvious that in 1986 scientists working in agriculture who applied for USDA funds were only 56% likely to be funded as their counterparts who applied for funds from NSF or NIH.

The grant applications to the USDA Competitive Grants program in FY 1986 have decreased by about 25%. This is a solid indicator that the aim of the Competitive Grants program, which is to bring basic researchers into agriculture, has been compromised. Apparently, researchers do not find it efficient to apply for grants that have such a low possibility of funding, a relatively low award rate as compared to NSF and NIH, and a shorter duration of the award - two years vs. three to five years. Additionally, the USDA budget in the Competitive Grants area is extremely small when compared with other federal agencies (Table 1). The advances in science expected for agriculture involve biological systems which are much wider in scope than those of the other agencies. A myriad of plants and animals must be included in agricultural research. Numerous studies on the "state-of-the-art" of agriculture have identified that severe knowledge gaps exist in the understanding of agriculturally important plant and animal cells at the molecular level. These deficiencies impede progress. Although the technology exists to move genes from cell to cell, the majority of the genes which should be moved to increase productivity or nutritional quality have not been identified.

The Competitive Grants budget is $44.3 million for FY 1988. At first glance this appears to be an increase over last year's funding but in reality it is not. In the budget which is administered by the Competitive Grants program it has been recommended that a number of programs be eliminated: Brucellosis ($475,000), Animal Science Reproduction Efficiency ($475,000), Pest Sciences ($2.853 million), Soybean Research ($4.953 million), and Alcohol Fuels ($514,000). It has also been recommended that a number of programs be enhanced: Plant Sciences ($3.358 million), Animal Science ($2.721 million), and Human Nutrition ($623,000). The net result is a reduction of $6 million in the Competitive Grants program. This is readily verified by comparing the FY 1987 and FY 1988 budgets administered by the Competitive Grants program. In FY 1987 there was a total of $50.576 million in the Competitive Grants budget. This included $5.476 million which was administered through the Competitive Grants program for animal health and disease research through section 1433 and $4.5 million in forestry competitive grants which were transferred from the Cooperative State Research Service. In the FY 1988 budget, the animal health and disease research, and the forestry competitive grants are eliminated. The net result is a $6 million decrease in funding for agricultural research through the Competitive Grants program ($50.76 million in FY 1987 versus $44.3 million requested in FY 1988). The ASM recommends that these two important programs continue to be administered through the Competitive Research Grants program at the FY 1987 appropriated levels.

This reduction in the overall budget administered by the Competitive Grants program would be very detrimental to agricultural research especially when one compares agriculture's research mission and its level of funding at the project level with NSF and NIH, and the level of funding that is provided for their mission (Table 1). A decrease in the budget for the Competitive Grants program will cause further erosion of the relative levels of funding for agricultural research. It will increase the tendency of the best researchers to change their research programs away from agriculture and towards the mission of other agencies. A status quo level of funding (FY 1987 vs. FY 1988) for programs administered by Competitive Grants is not on the level of $44.3 million for 1987 but it is at a level of $50.3 million. Additionally, the FY 1987 budget contains a reduction in the plant science budget, about $4 million from the FY 1986 budget. Restoration of the Competitive Grants budget to the FY 1986 level would require restoration of the $4 million for a total budget for FY 1988 of $54.3 million. The ASM has strongly recommended that a commodity conversion initiative ($5 million) be implemented in the Competitive Grants program. Therefore, a status quo budget including a new initiative would be $59.3 million.

The ASM strongly believes that Congress should address the question of providing parity for agricultural research grants with NSF and NIH research grants. A budgetary plan should be devised to systematically increase the Competitive Grants program until parity is reached with NSF and NIH. In FY 1986, 434 proposals were funded through the Competitive Grants program. It has been estimated that in FY 1986 there were more than 422 proposals (not including the wood utilization programs) that were judged by peer evaluation to have the scientific merit but which were not funded because of insufficient monies to make the awards. If these were funded, the percentage of proposals resulting in grants would be 44%, a level that is commensurate with NSF and NIH. A level of funding in USDA that would be on a par with NSF would require $169 million in the Competitive Grants program (1,935 proposals x 0.399 x $70,300 per year x 3 years). This level of funding for a basic understanding of agriculture would cost less than one dollar per capita per year to ensure that the U.S. retains its preeminent position in agriculture and continues to supply its citizens with the most nutritional food at the lowest possible cost.

The Adminstration has recommended budgetary reductions for Higher Education grant programs ($5.54 million) with no funding requested for Competitive Graduate Training grants. This comes at a time when the number of research trainees is declining and the situation will be worsened by cuts in the research training budget of the USDA. If the annual award rate for Competitive

Research Grants does not increase to an appropriate level to permit training assistance on a grant, then it is not feasible to terminate funding for training grants in the FY 1988 budget. Full funding of the Competitive Grants Program at the level of $169 million might eliminate the need for training grants, but funding at lower levels does not. It usually requires that an individual study and conduct research three to five years beyond a BS level to earn a Ph.D. When awards are allotted in the Competitive Grants program, they average two years. These awards terminate in the middle of a doctoral candidate training in his or her research. If a new award is not made in the same area of research, the candidate is devoid of support and often results in the termination of the research project. Even if the candidate obtains some support (teaching assistantship or unrelated job) to compensate for the loss of his or her fellowship ($7,000 to $12,000 per year), it results in an inordinate increase in the time it takes a candidate to earn a Ph.D. This significantly decreases the number of productive years that are devoted to agricultural research.

The Administration has also recommended that the research activity of the Special Grants program ($52.0 million), be eliminated. It should be recognized that these proposed cuts ($52.0 million) will also significantly impact the training of individuals in agriculture since these funds support graduate students and postdoctoral fellows. If these programs are eliminated, the monies inherent in the programs for training should be shifted to the Competitive Grants program to ensure that there is an adequate supply of scientists to satisfy the needs of agriculture in the future. The ASM also recommends that if Congress determines it is necessary to restore funding for these programs because it perceives specific problems must be solved in agriculture, that, whenever possible, it direct these funds to research involving the new methodology of biotechnology. This approach would yield innovative solutions to new and old problems that have not been possible in the past. This type of direction would solve specific problems while building a biotechnology base in agriculture which would subsequently be applied to all agricultural needs.

The ASM is seriously concerned that funding for the animal welfare inspection program of APHIS ($5.8 million) is inadequate. We believe the APHIS animal welfare program is essential for equitable and uniform inspection of animal research facilities and licensed dealerships. Enforcement of the Animal Welfare Act on a national basis is in the best interest of the federal government and the biomedical research needs of its citizens. The ASM strongly supports the assessment of the National Association for Biomedical Research (NABR) that $10.0 million for FY 1988 is the minimum amount required to implement the Animal Welfare Act as recently amended.

The ASM supports the $4 million in the APHIS budget for a new initiative in biotechnology to expand and implement the newly promulgated regulations and procedures for overseeing the development and marketing of genetically engineered products. It is especially critical that these monies be used to raise the level of competence within APHIS to present standards.

In general, the ASM supports the $7.347 million within the ARS for germ plasm collection and maintenance. However, we understand that at the present time, the bulk of the funds for this program is for archival purposes and for building of facilities. We believe that the mere storage of materials constitutes a flawed program. These collected and stored materials must be systematically studied at the molecular level for gene expression if economic benefits are to be gained from this program.

We appreciate the opportunity to express our views and stand ready to assist in any way possible during your deliberations on the FY 1988 budget for the USDA research and training budget.

Sincerely

Jean E. Brenchley

Jean E. Brenchley, Ph.D.
President, American Society for
Microbiology

Harlyn O. Halvorson

Harlyn O. Halvorson, Ph.D.
Chairman, Public and Scientific
Affairs Board, ASM

Rudy Wodzinski

Rudy J. Wodzinski, Ph.D.
Chairman, Committee on
Agricultural, Food and Industrial
Microbiology, PSAB

Statement of the Association of American Veterinary Medical Colleges

Mr. Chairman and members of the Subcommittee, thank you for the opportunity to present the Association of American Veterinary Medical Colleges (AAVMC) recommendations for the FY1988 appropriations for the Department of Agriculture. AAVMC is the national organization of veterinary medical colleges and veterinary science departments. We represent approximately nine thousand veterinary students, two thousand six hundred graduate students, and two thousand nine hundred faculty members in these academic units. We work with the National Association of State Universities and Land Grant Colleges (NASULGC) on research, education and extension and with the American Veterinary Medical Association (AVMA) on animal research, animal welfare, and animal health and disease - related programs.

Our principle concerns relate to the health of animals and the contributions which animals make to the health and welfare of the American people. Disease in individual animals and in animal populations represents a major cost. Direct costs of clinical disease are estimated to be 15-17 billion dollars each year and sub-clinical disease may well equal that loss. At the level of the individual livestock producer, this often represents the difference between remaining in or being forced out of farming. The direct cost of disease ultimately is passed on to the consumer, but the consumer and the food processing industry also pays a heavy price in monitoring food products for infectious agents and chemical residues. Many of the food safety issues arise because of overt animal disease and our control efforts. In describing the cost of animal disease, we must also add the emotional cost to the individual animal owner who must deal with the suffering of pets or livestock.

SUMMARY RECOMMENDATIONS ON EXISTING PROGRAMS

Cooperative States Research Service	
* Hatch Act total funds	$ 173,792,000
* Animal Health (Section 1433)	6,400,000
* Animal Health (Special Grants)	6,666,000
* Minor-Use Animal Drugs (Special Grants)	240,000
* Biotechnology (Competitive Grants)	25,000,000
* Animal Science	10,000,000
* Aquaculture	518,000
* Higher Education	22,000,000
Animal and Plant Health Inspection Service	
* Animal Welfare Act	10,000,000
Food Safety and Inspection Service	397,000,000
Office of International Cooperation and Development	
* Foreign Currency Research Program	5,000,000

RECOMMENDATION ON NEW INITIATIVE IN FOOD SAFETY

We believe that it is essential to undertake a major competitive grants program in food safety and animal health. Such a program should be initiated as soon as possible at a level of no less than $20 million dollars the first year, and increased to $25 million dollars in the second year.

The growing concern for water quality is important and we support the NASULGC recommendations in that area. No less important, however, is the problem of food safety and animal health. Major problems with salmonella in milk and poultry and listeria in dairy products are the most publicized, but they represent only a small part of the potential problem of infectious agents and chemical residues in foods of animal origin. Contributing to that potential is an increasing number of people who are immunologically limited or deficient. This would include persons with AIDS, persons on chemotherapy for cancer, and the elderly population in general. A major expansion of research is needed that will identify and prevent the introduction of infectious agents and chemical residues which may cause serious illness and death. Furthermore, improvement in animal health and enhanced quality of food products through detection of microbes and residues will benefit all consumers and greatly advance the U.S. export market.

Research in this initiative would address problems ranging from the production unit though the processing and eventual distribution of foods of animal origin. The application of computers and electronic dataprocessing can be developed for animal disease surveillance, epidemiology, and risk management. Research programs would extend to on farm infection and residue detection methods and control measures, molecular epidemiology, cost benefit analyses, economic assessment, and improved management techniques.

Animal Health and Disease Research

The wide array of CSRS programs related to animal agriculture are making significant contributions to the profitability and productivity of our livestock industry.

Hatch Act funds supplement state research funding to provide critical broad base support for the research community. Section 1433, Animal Health Formula Funds, supports research on problems that are important locally or regionally, but which are not of significant national scope to compete for the competitive grant funds. In addition, both of these programs provide seed money for exploratory pilot research projects in high priority new areas.

The competitive research grants in the area of biotechnology, animal science, and Section 1414C, Animal Health Funds support the most meritorious research proposals based upon competitive peer review. Research in the area of biotechnology is making it possible to gain a much better understanding of the genetic and molecular aspects of microorganisms, embryos, cells, and immunobiology. Continued development of these technologies is necessary for improved diagnostic methods and vaccines. The Section 1414C funds support the most meritorious animal health research proposals based upon competitive peer review. Recent technological advances applicable to veterinary medical problems under this program promise major breakthroughs in the diagnosis, prevention, and control of food animal health hazards.

Continued research on minor use animal drugs is critical for a significant part of our food animal industry. The cost associated with drug development and approval limits pharmaceutical manufacturers from developing extensive applications for minor species. Yet these minor species are an important part of the food animal industry and continued research on the treatment and prevention of disease in these species is essential. Continuation of this special grants program is an extremely high priority for AAVMC.

The rapidly expanding significance of aquaculture in the food animal industry makes the continuation of these special grants very important. Research in aquaculture has tremendous potential for contributing to the food supply of this nation and of the world. Disease problems in fish production and processing are of no less importance than in mammals and the research supported by these funds is allowing significant breakthroughs in our understanding of fish diseases.

Higher Education

The USDA study in 1986 detailed the rapidly developing problem of inadequate human resources in agriculture. We strongly support the NASULGC recommendation for an increase in competitive graduate training grants to the level of 10 million dollars and the addition of the new initiative and challenge grants. Our organization is currently evaluating the need for graduate training for veterinarians during the next ten years. Our preliminary estimates are that there will be a need for no less 450 and up to 1000 additional graduate training positions for veterinarians in the next ten years. An expansion of the competitive graduate training grants would be a helpful beginning in addressing this major need.

Animal and Plant Health Inspection Service

The AAVMC is very supportive of the animal related activities of APHIS. This organization continues to be extremely effective in monitoring the health and welfare of the American livestock industry and are to be complemented on their many successes. We would especially like to compliment them on a relatively new activity - The National Animal Health Monitoring System. That program will be a major contribution to our understanding of animal health problems and will lead to more targeted research on the more significant problems facing the animal industry.

The appropriation to support the enforcement of the Horse Protection Act and the Animal Welfare Act should be increased to 10 million dollars. The present appropriation is not adequate to allow APHIS to adequately conduct its regulatory responsibilities. Additional funds must be added for additional training of inspectors as well as expand investigation and inspection activities. The ever increasing concern of our society for appropriate animal care will accept no less than enforcement of the minimal standards set forth in the Animal Welfare Act.

Food Safety and Inspection Service

AAVMC endorses the recommendations made by the American Veterinary Medical Association and by the National Association of Federal Veterinarians concerning adequate appropriations for meat and poultry inspection. We believe that it is unwise to shift the cost of this program to user fees. Consumer confidence in our inspection system is essential and that confidence will be eroded if the cost of inspection is paid by the food processor. The recommended level of 397 million dollars in governmental cost is less than two dollars per person in our society. That is a small price to pay for the benefit derived from this program.

Office of International Cooperation and Development

The AAVMC urges that the foreign currency program on international research be continued and supported at a level of 5 million dollars. This program opens foreign markets to U.S. products, protects U.S. agriculture from foreign diseases and pests, provides opportunities for U.S. scientists to gain first hand experience with agricultural practices and problems in the developing world, and provides a mechanism for technology transfer.

Summary

It is important to recognize the critical nature of USDA funding in all of these areas. Productivity of these funds are magnified by the research and educational environment where most of them are used. Veterinary medical institutions spend approximately three dollars in related biomedical and basic science research for each dollar spent on food animal applied research. All of these research activities compliment each other and provide for rapid advances in basic research as well as immediate application to contemporary field problems. Also, every dollar spent for graduate education contributes to the research base and dollars expended for research provide a significant base of support for training a new generation of scientists.

We thank you for this opportunity to comment on the appropriations for USDA. Animals and animal products make up a significant portion of the contributions of American agriculture to the health and welfare of the American people. Food supplied from animals and animal products must be as wholesome and safe as possible. Veterinary medicine plays a critical role in maintaining that quality and that safety. The funding priorities which we support will allow the maintenance of and some slight improvement in the health of animals, the productivity of American agriculture, and the protection of public health.

STATEMENT OF THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA

AGC is:

- More than 32,500 firms including 8,400 of America's leading general contracting firms responsible for the employment of 4,000,000-plus employees;
- 106 chapters nationwide;
- More than 80% of America's contract construction of commercial buildings, highways, industrial and municipal-utilities facilities.

The Associated General Contractors of America represents more than 32,000 firms including 8,400 of America's leading construction companies. These general contractors employ more than 4,000,000 workers, and perform more than 80% of America's contract construction of commercial buildings, highways, industrial and municipal-utilities facilities.

AGC supports appropriations for the Soil Conservation Service (SCS) at levels which are adequate to fund the major construction programs within the SCS. Appropriations for the SCS should be, at the very minimum, at the levels made in years prior to fiscal 1987.

SCS is one of the major services within the United States Department of Agriculture. Established by an act of Congress in 1935, the SCS has responsibility for developing and carrying out a national soil and water conservation program in cooperation with groups including landowners, operators and other land users/developers, community planning agencies and regional resource groups, and other agencies of government - federal, state and local. The SCS also assists in agricultural pollution control, environmental improvement and rural community development.

The soil and water conservation program is carried on through technical help to locally organized and operated conservation districts, local sponsors of watershed protection projects and resource conservation and development projects, and consultive assistance to other individuals and groups. SCS also carries on its programs through direct award of contracts for construction of small watershed projects.

Congress recognizes the importance of SCS and the value of its accomplishments in the area of soil and water management. Although it was virtually directed at the Civil Works Program of the U.S. Army Corps of Engineers, the Water Resources Development Act of 1986, P.L. 99-662, included several provisions which apply to SCS. These provisions recognize and address the additional benefits that SCS projects provide to taxpayers. The inclusion of these provisions reveals that Congress acknowledges that SCS has an important function in the water resources program.

Adequate funding for the SCS construction programs is critical. Over the past several years, however, the amounts provided for the construction programs of SCS have been dwindling. For example, the appropriation for the Watershed and Flood Prevention Operations Program of SCS was approximately $230 million in fiscal 1986. In fiscal 1987, the appropriation for this account was approximately $166 million. Examples of dwindling appropriations for other SCS construction programs including the Resource Conservation and Development Program and the Great Plains Conservation Program could be given. Suffice it to state that the levels for all SCS construction programs were at the bare minimum for fiscal 1987.

AGC believes that the Watershed and Flood Prevention Operations Program should be appropriated at least $200 million in fiscal 1988 in order to avoid any disruptions in the completion of the construction projects within its program. The Resource Conservation and Development Program should be provided between $35 and $40 million in fiscal 1988. The Great Plains Conservation Program should be appropriated at least $25 million in order to accomplish the task set forth in the Soil Conservation and Domestic Allotment Act.

Appropriations for the SCS construction programs are necessary, as are appropriations for conducting research and planning for the purpose of determining how these construction programs will proceed in the future. Appropriations for the Watershed Planning and the River Basin Surveys and Investigations Accounts must be provided at adequate levels to ensure that the entire SCS program can be continued into the future.

AGC urges Congress to provide adequate funds for the construction programs of the Soil Conservation Service.

STATEMENT OF JACK A. BARNETT, EXECUTIVE DIRECTOR, COLORADO RIVER BASIN SALINITY CONTROL FORUM

Requesting additional funds over and above the President's 1988 budget request for the Colorado River Basin Salinity Control Program.

Including:

1. $4,000,000 for onfarm salinity control
2. $2,000,000 for SCS and other technical assistance

This last year, the Congress provided $3.8 million for work associated with the newly enacted Colorado River Basin agriculture salinity control program. From ACP appropriations which the Congress had designated for salinity expenditure in past years, $2.2 million was available in carry-over funds. Thus, $6 million has been available for the program in the current fiscal year.

The Colorado River Basin states initially identified between $7 million and $8 million as needed to move the program ahead on the preferred schedule. However, in view of fiscal constraints the federal government is now experiencing, this year the Basin states have decided to request that only $6 million be made available for this line item for FY 88 (which is a no-increase request).

RECENT BACKGROUND
DETAILED FUND ALLOCATION

To date, the onfarm salinity control program has commenced in only two geographic areas: the Uinta Basin of Utah and the Grand Valley of Colorado. The Department of Agriculture has nearly completed the rules and regulations necessary for expenditure of the line item appropriations provided by the Congress for the current fiscal year. We have been advised that presently there are contracts awaiting farmers' signature. Virtually the day the rules and regulations become effective, the program will become operational, and a majority of the funds designated by the Congress will be allocated. In the near term, we anticipate that all of the appropriated funds will be designated for contracts with the Colorado River Basin farmers.

Without congressional action to continue the line item, no additional funds would be available for cost sharing in FY 88. A $6 million level of appropriation would allow for the continuation of the program in the Uinta Basin and the Grand Valley, and it would also allow for advance planning to proceed in perhaps two additional areas: the Big Sandy area of Wyoming and the Lower Gunnison area of Colorado. With this advance planning, it is hoped that in future fiscal years, the onfarm program can be implemented in other needed areas.

Looking further ahead, additional areas of Utah, Colorado, and Nevada have been identified as being very cost-effective salinity control onfarm program areas. These much needed water quality programs could not move ahead unless the federal government, the Basin states, and the local farmers are in a position to financially participate in this cooperative program. The Basin states and the local farmers are ready to proceed with this partnership and pay at least 51 percent of the cost of this construction program.

JUSTIFICATION

The water of the Colorado River system serves some 17 million people and irrigates approximately 1.6 million acres of land in parts of the seven Colorado River Basin states. The river also provides domestic and irrigation water to Mexico. Salinity has long been recognized as one of the major problems in the river. Water users in the lower reaches of the river system have suffered significant adverse impacts due to the river's salinity. These impacts have been estimated to have reached over $100 million a year. Without salinity control measures and with increased demands for Colorado River water in the Basin, the river's salinity is projected to increase, further impairing the usefulness of this water supply. The economic damages suffered by the water users could double by the turn of the century.

The Basin states' concern with the river's increasing salinity led them to create the Colorado River Basin Salinity Control Forum in 1973. The Forum (whose members are appointed by the governors of the respective states) developed a salinity control policy that stated that while the Basin states continue to develop their compact-apportioned waters, salinity concentrations must be maintained at or below those levels found in the lower river in 1972. This salinity control objective is the Basin states' adopted-EPA approved water quality standard for the Colorado River. The standard was adopted pursuant to the Clean Water Act. The policy forms the basis for the cooperative federal/state, Basin-wide salinity control plan. The Forum has a continuing responsibility to see that a salinity control plan is implemented to meet the policy objectives.

After discussions with the federal government, the Republic of Mexico, and the seven Colorado River Basin States, the Congress enacted in 1974 the Forum-sponsored Colorado River Basin Salinity Control Act (P.L. 93-320). Title I of the Act established a program to reduce the salt concentrations below Imperial Dam (the last diversion point on the Colorado River in the United States), so that the United States could honor its 1973 agreement on Colorado River salinity with Mexico. The Act established a program, Title II, which allowed the states and the federal government to work together to prevent salinity increases in the Colorado River above Imperial Dam, benefitting users in the United States as well as Mexico. The 1974 Act also created a Colorado River Basin Salinity Control Advisory Council, composed of gubernatorial representatives of the Basin states to advise the Secretaries of the Interior and Agriculture and the Administrator of the Environmental Protection Agency as to needed annual adjustments to the salinity control effort.

In 1984 the Congress enacted much needed amendments to the 1974 act. These amendments were advanced by the Forum. The amendments (Public Law 98-569) authorized additional Department of the Interior and Department of Agriculture activities that were needed to meet the objectives of the Act. In recognition of the proven cost-effectiveness of Agriculture's onfarm management activities in controlling river salinity in the Basin, a separate Colorado River Basin onfarm management salinity control program was authorized for the Department of Agriculture.

Consistent with the newly enacted amendments and in working with Agriculture, the Advisory Council made specific recommendations in its 1986 Annual Report relative to FY 88 funding for the salinity control efforts. The recommended funding level is the minimum amount the Council found necessary to maintain salinity concentrations at or below the adopted salinity standards.

Despite the fact that the program has been funded in the past by congressionally designated ACP funds (also, last year a $3.8 million line item was established), the President's proposed FY 88 budget calls for zero funding for Agriculture's onfarm program. In previous fiscal years, the President requested that more than $12 million per year be allocated in anticipation of the new congressional authorization. The President's proposed 1988 funding level seriously jeopardizes the continued progress and effectiveness of the Colorado River salinity control efforts. It significantly restricts the implementation of the Department of Agriculture's cost-effective onfarm salinity control measures which were initiated in 1979. To maintain a realistic, efficient schedule, the President's budget needs to be increased by $6 million for Agriculture's onfarm program and associated technical assistance.

Until the current fiscal year when the Congress established the new line item funding, the Congress since 1979 has designated ACP funds to support the program which has required about a 25 percent local contribution.
Under the newly authorized, cooperative onfarm salinity control program, a combined state and local contribution of 51 percent would be provided as a minimum non-federal sharing of costs. Thus, the federal share of the costs would be less than half of the total onfarm program costs.

At a time when the nation faces significant financial difficulties, it is recognized that funds for every federal program must be reviewed. The Advisory Council's funding recommendations, however, are considered to be the minimum level of funding needed to assure that salinity control efforts move forward in a timely manner. The $6 million level represents a level of appropriation already reduced from previously established desired levels. Work must continue on the Department of Agriculture's onfarm program. Delays will not only result in greater salinity pollution of the Colorado River in the short term, but ultimately will require the expenditure of much greater amounts of funds on this effort.

STATEMENT OF JACK L. STONEHOCKER, DIRECTOR, COLORADO RIVER COMMISSION

Mr. Chairman, members of the subcommittee, Public Law 93-320 as modified by Public Law 98-569, sets forth a program under the United States Department of Agriculture to control salinity in the Colorado River. This program is embodied in the Colorado River Basin Salinity Control Program and requires non-federal cost sharing by farmers and the seven Colorado River Basin states which in combination will amount to about 50% for on-farm salinity control measures. Nevada strongly endorses this program. We are a state limited on water resources and southern Nevada is dependent on the Colorado River as a major water supply. Increasing levels of salinity threaten the water quality of this precious resource and an effective salinity control program is crucial.

The President's proposed budget for FY 1988 did not include any funding for the United States Department of Agriculture's salinity control program. I am very concerned about the continuance of this important water quality effort. The Colorado River Basin Salinity Control Forum (Forum), on which I serve as a Nevada representative, has determined that the Department of Agriculture will require a total appropriation of between $7 million and $8 million to continue the salinity control program on a preferred schedule. However, recognizing the fiscal restraints that the Federal Government is now experiencing, the Forum has carefully evaluated the funding requirements for the program and has concluded that a minimum funding level of $6 million is required to ensure that basic and essential components of the program currently underway will continue to move ahead.

Given the importance of the salinity control program in preventing the degradation of our Colorado River water supply, we are respectfully asking that the subcommittee support and recommend an appropriation in the amount of $6 million for the United States Department of Agriculture to be used for the continuing effort to check further increases in the salinity of the Colorado River.

STATEMENT OF SUSAN HAGOOD, WILDLIFE MANAGEMENT SPECIALIST, DEFENDERS OF WILDLIFE

Thank you. Mr. Chairman, for the opportunity to express the views of Defenders of Wildlife with respect to the Fiscal Year 1988 U.S. Department of Agriculture budget for the Animal and Plant Health Inspection Service/Animal Damage Control Program and the Extension Service. I am Susan Hagood Wildlife Management Specialist with Defenders of Wildlife. I request that my entire statement be incorporated in the record.

Defenders of Wildlife is a national, non-profit conservation organization representing more than 100,000 members and supporters. Our goal is the preservation and enhancement of the natural abundance and diversity of wildlife and the protection of wildlife ecosystems. Defenders supports the recovery of threatened and endangered species and the enhancement of our national wildlife refuge system. We also support and promote wildlife management philosophies and practices that benefit all wildlife.

Defenders' recommendations for FY88 appropriations within the Department of Agriculture focus on the demonstration and, where appropriate, use of safe and effective non-lethal techniques to reduce predation of domestic livestock and minimize agricultural losses to vertebrate wildlife.

The Animal Damage Control (ADC) Program was transferred from the Department of the Interior to the Department of Agriculture with the FY86 Continuing Resolution. Within the ADC Program, Congress provided appropriations for the continuation of livestock guarding dog work in Minnesota and Oregon in both FY86 and FY87. Despite Congressional direction in Appropriations Committee Reports and the Conference Report to fund these guard dog projects, the Animal and Plant Health Inspection Service (APHIS), which now administers the Animal Damage Control Program, has in general failed to comply with Congressional direction in this regard without being strongly encouraged to do so by a number of Members of Congress. Further, APHIS has not answered the questions of Members of Congress concerned about these projects in good faith.

Interested Members of the House Subcommittee on Agriculture Appropriations have suggested that, in order to ensure the expeditious initiation of FY88 programs and to minimize delay and confusion, Defenders of Wildlife recommend language for inclusion in the Committee Report. Therefore, we have included in bold print under each subheading suggested language for each request.

EXTENSION SERVICE BUDGET

TOTAL REQUEST - $256.000

New England Vertebrate Damage Control Program $166.000

Defenders recommends that **$166,000 be provided to the Extension Service to establish a New England Vertebrate Damage Control Program.**

Each year, New England farmers are faced with conflicts between wildlife and agricultural production. Losses to vertebrate wildlife can be substantial. In Vermont, white-tailed deer reduce apple yields. In Massachusetts, bird control has been identified as a major problem. And in Maine and New Hampshire. livestock producers and bee keepers seek means to deter predation by coyotes and bears respectively State agriculturalists, wildlife biologists and Cooperative Extension officials recognize the need for a coordinated effort to address these concerns and have collectively expressed support for a Vertebrate Damage Control Program.

A Vertebrate Integrated Pest Management (IPM) Specialist, based at the University of Maine's Cooperative Extension Service offices. would help to meet the needs of New England farmers faced with losses to vertebrate wildlife. The proposal for this position. developed by Extension officials. agricultural leaders and conservationists, states that the Specialist will operate within a three-tiered system. Preference will be given to the prevention of damage through the distribution of information and technical guidance. In situations where damage is already occurring, the Specialist will provide information to producers about non-lethal methods of damage control. Information on lethal wildlife control as a last resort will be provided when preventive and non-lethal techniques fail to solve the damage problem.

The Vertebrate IPM Specialist will coordinate with Extension personnel in each state to pinpoint trouble areas. This individual will develop. distribute and promote materials on preventive wildlife damage techniques, and will establish on cooperating farms in each state demonstrations of field use of damage control techniques. Funds are being requested to support Cooperative Extension Service involvement in Massachusetts New Hampshire and Vermont. An advisory committee made up of representatives from each state and major agricultural sectors will assist in the development of the program.

To ensure the effectiveness of this program, the requested appropriation of $166,000 includes funds for demonstration/research and incentive payments to assist farmers interested in utilizing alternative wildlife damage control techniques.

Kansas Wildlife Damage Control Program $90,000

Defenders of Wildlife recommends that **$90,000 be provided to the Extension Service to expand the Kansas Cooperative Extension Service's Wildlife Damage Control Program to better assist farmers and residents in that state.**

The existing Kansas Wildlife Damage Control Program, conducted through the Cooperative Extension Service at Kansas State University, is the only one of its kind in the nation. Its focus has traditionally been the reduction of livestock losses to predators. The program has worked with livestock producers to reduce losses through preventive techniques, and has provided training to enable producers to solve predator problems themselves, rather than depending on the federal Animal Damage Control Program. This approach has been extremely successful. Losses of Kansas livestock to predators have been reduced to very low levels; the program's annual budget of $50,000 is a fraction of expenditures for animal damage control in other states.

As urbanization has increased in Kansas and acres in agricultural production have multiplied. new conflicts with wildlife have arisen. The Kansas Extension Wildlife Damage Control Program is now asked to respond to problems related to a wide range of wildlife including mammals, reptiles and birds. In addition, new interest in sheep production in Kansas has resulted in an increase in the number of producers; new producers need the assistance of the Wildlife Damage Control Program in establishing long-term predation prevention programs. However, these increased demands on the program have not been met by an increase in staff or budget.

At present, one Extension Service Specialist is responsible for wildlife damage control throughout the entire state. One individual cannot respond to wildlife conflict situations in the manner proven most effective by this program -- on-site visits and training of individuals and groups. The requested funding will provide for the addition of three Extension Assistants. These positions would greatly increase the capacity of the program to serve Kansans with damage control information and training.

Each Extension Assistant will be trained by the Specialist in one general area of damage control, such as predator, rodent and urban wildlife control. The Assistants will develop materials on preventing or reducing conflicts, and will work with individuals and groups needing assistance. Prevention of conflicts will continue to be the centerpiece of the program. This approach minimizes the killing of wildlife while reducing property and crop damage.

A year-end evaluation of the program will be made to assess the effectiveness of its methods in reducing wildlife conflicts.

ANIMAL DAMAGE CONTROL PROGRAM -- RESEARCH BUDGET

TOTAL REQUEST - $100,000

Conditioned Taste Aversion	$100,000

Defenders recommends that **$100,000 in FY88 Animal Damage Control research funds be provided for the continuation of conditioned taste aversion research underway in Arizona, California and Nevada.**

Taste aversion is a method of predator deterrence in which mutton baits are laced with an emetic, lithium chloride. Coyotes consuming the bait become ill and learn to dislike the taste of mutton. This technique is used successfully by livestock producers in the Canadian provinces of Saskatchewan and Manitoba. It is both inexpensive and easy to use.

Conditioned taste aversion research, administered with Congressional funds by Arizona State University's Center for Environmental Studies and conducted in Arizona, Nevada and California, has received $100,000 for the past three fiscal years. Project scientists and personnel at the Denver Wildlife Research Center have agreed that FY87 funds (to be released June 1, 1987), and those requested for FY88 through FY91, will be most effectively used in conjunction with a reconfiguration of the current research design. The changes will ultimately provide a clearer picture of the usefulness of this technique to the American livestock producer.

Defenders of Wildlife is requesting that $100,000 in FY88 funds for research conducted by the Animal Damage Control Program be earmarked for conditioned taste aversion work. This money will be used to provide livestock producers with information about conditioned taste aversion and guidance in using this technique in their own operations. Although these efforts will be concentrated in Arizona, California and Nevada, livestock producers throughout the country will be provided information about the technique on request.

A scientific analysis of predation losses and effectiveness of this technique in reducing predation in American livestock systems will be conducted on an ongoing basis with results and conclusions published at the completion of the project.

ANIMAL DAMAGE CONTROL PROGRAM -- OPERATIONAL BUDGET

TOTAL REQUEST - $200,000

Oregon/Washington Livestock Guarding Dog Program	$100,000

Defenders recommends that $100.000 in the FY88 operational budget of the Animal Damage Control Program be provided for the continuation of the Oregon/Washington livestock guarding dog program.

A pilot livestock guarding dog program, operated through Oregon's Cooperative Extension Service from FY84 through FY86 with Congressional funding, demonstrated that the use of guarding dogs is a cost-effective method of predator control. In 1986, 120 dogs on 80 farms and ranches saved Oregon livestock producers an estimated $100.000 in sheep and goats that would otherwise have been lost to predators.

As a result of Cogressional direction, the Oregon program is continuing in FY87 and has been expanded to neighboring Washington. The Oregon Extension Wildlife Specialist conducting that state's program will work with Washington Cooperative Extension personnel to ensure the distribution of information about guarding dogs to livestock producers in that state, and will provide assistance to producers using the dogs.

The FY87 Oregon/Washington livestock guarding dog program is being conducted through the Cooperative Extension Services in these states. For FY88, however, the Animal and Plant Health Inspection Service has expressed its intent to administer any guarding dog work through the operational portion of its Animal Damage Control Program. Defenders has reservations about APHIS/ADC administration of guard dog programs. These reservations stem in part from the apparent reluctance of APHIS to release Congressionally appropriated funds for guard dog work (noted on page 1 of this testimony).

Defenders believes that the activities of the Extension Service and the ADC Program also argue for the placement of guarding dog programs in the Extension Service. The ADC Program provides a service to livestock producers experiencing predator losses. This usually involves the removal of predators by an ADC field employee utilizing such techniques as trapping. poisoning and aerial hunting. There is generally no effort to provide information to the producer about reducing the likelihood of future losses.

In contrast, the state Cooperative Extension Services provide up-to-date information to the agricultural sector about a wide array of agricultural issues. The distribution of educational information about guarding dogs is an important part of the Oregon dog program. The Oregon Specialist maintains ongoing contact with producers using dogs to provide recommendations for dog and/or livestock management changes when problems arise in an effort to maximize the effectiveness of the dog. The Extension System provides needed information, but, unlike the ADC Program, not the service itself.

Defenders feels that the most appropriate placement for guarding dog programs is very likely with the Extension Service, since successful use of dogs results from the communication of appropriate information. However, in that APHIS, in its new-found administration of animal damage control, has expressed interest in conducting livestock guarding dog programs, Defenders recommends that FY88 funds for the Oregon/Washington guard dog program be earmarked within the ADC operational budget. Defenders' upcoming analysis of FY87 and FY88 administration of guarding dog programs as compared with previous work conducted through the Extension Service will determine whether future work should best be undertaken by APHIS or the Extension Service.

Idaho/Wyoming Livestock Guarding Dog Program $100,000

Defenders recommends that **$100,000 in the FY88 operational budget of the Animal Damage Control Program be provided for the continuation of the livestock guarding dog program in Idaho and Wyoming.**

Congress provided for the establishment of a new livestock guarding dog program, to be conducted in Idaho and Wyoming, in the FY87 budget of the Animal and Plant Health Inspection Service. Conflicts with predators, particularly the coyote, have long plagued livestock producers in these states. The demonstrated effectiveness of livestock guarding dogs in reducing predation warrants the continuation of this program in FY88.

STATEMENT OF B. JACK WARREN, EXECUTIVE VICE PRESIDENT, FOREST FARMERS ASSOCIATION

Mr. Chairman, my name is B. Jack Warren, Executive Vice President of Forest Farmers Association, which is headquartered in Atlanta, Georgia. Forest Farmers Association, established 45 years ago, is an organization of private timberland owners in 15 southern states. Our members own over 40 million acres of commercial forest land.

My statement will be directed toward the President's budget request for 1988 appropriations related to several elements of the Department of Agriculture. We strongly support the President's efforts to balance the federal budget, and recognize that funding for all activities and programs must be carefully scrutinized and evaluated. We do urge, however, that reductions be made on a priority basis with essential and most highly cost-effective forestry programs maintained at least at basic minimum levels. Our nation's forest development is vital to its long-range economic health, and certain programs such as extension forestry, conservation programs, and research should be administered on a continuing basis.

Our association recommends the following:

	Actual FY '87	Budget FY '88	Recommendation FY '88
	Millions		
Research			
McIntire-Stennis	$12.4	$12.0	$25.0
Extension			
Renewable Resources Extension Act	2.3	-0-	4.0
Conservation Programs			
Agricultural Conservation Programs	176.9	-0-	176.9
Forestry Incentives Program	11.9	-0-	12.5
Soil Conservation Service	608.7	476.3	608.7

Research

This committee has always recognized in the past the need for research to maintain the agricultural and forestry components of our economy and to realize that research must be maintained as a long-term process to be effective. We would like to see the funding for the Hatch Act and McIntire-Stennis increased to $25 million.

Extension

The Renewable Resources Extension Act was passed in 1978 but was not funded until 1983. The appropriation was set at $2 million when the authorization was $15 million. The President's budget advocates no funding for FY 1988, but we urge your consideration of an increase at the level of $4 million. This new program has met with much success in the few years it has been in existence. We support this legislation, which affects all of our members, to be funded at a high enough level to function adequately to extend needed technology to all forest landowners since our demand for wood will double in 20 years.

Conservation Program

The Agricultural Conservation Program which was funded at $176.9 million in FY 1987 is proposed to be zero in FY 1988. We recommend that the funding level be at least the FY 1987 level so that the Rural Community Fire Protection program which provides funds to state foresters to organize, train and equip rural fire departments will not be affected.

We are most concerned about the elimination of the Forestry Incentives Program (FIP) in the President's budget. This program has met with much success by demonstrating its effectiveness in regenerating cut-over lands which favorably influence future productivity of these lands which in turn stimulates the economy. The Forestry Incentives Program is targeted to the regeneration of the best quality forest land as well; and according to a U.S. Forest Service "assessment" study, for every $100 public monies spent to regenerate southern pines, society will benefit from a $3,800 reduction in the total price of wood products it consumes in year 2020. Therefore, we feel that funding should remain at $12.5 million.

Our association is interested in maintaining funds for the Soil Conservation Service at least at the FY 1987 level. This agency is most vital to the future productivity of private farmlands and in meeting severe problems facing the farmers of the United States. We would not be the agricultural nation we are today if it had not been for the outstanding accomplishments of this agency.

Your committee over the years has demonstrated a deep understanding and support for adequate federal programs affecting the timberland owner and farmer. We are confident that you and your committee will make the right decisions in order to keep our nation the leader in forestry. Thank you for the opportunity to present these views.

STATEMENT OF DR. I. GARTH YOUNGBERG, EXECUTIVE DIRECTOR, INSTITUTE FOR ALTERNATIVE AGRICULTURE, INC.

I am Garth Youngberg, Executive Director of the Institute for Alternative Agriculture, Inc., a private, non-profit agricultural research and education organization with offices in Greenbelt, Maryland. The Institute, which is governed by a 13-member grass-roots Board of Directors, seeks to advance, through the development of research and education programs, systems of food and fiber production that are economically profitable, resource conserving, environmentally sound, and sustainable in the long term. The Institute is grateful to the Subcommittee for the opportunity to testify on Subtitle C of the Food Security Act of 1985.

Because the intent of Subtitle C of Title 14 is to develop expanded research and education programs germane to reduced input farming systems, the Institute is strongly supportive of the needed appropriations for this Subtitle. We believe it addresses a number of important needs and concerns.

First, scientifically credible research programs provide one of the most important means for correcting the unfortunate and misleading stereotypes that have long been associated with alternative, reduced input farming systems and methods. For this reason, it is important that a substantial portion of such programs be conducted by so-called establishment scientists and institutions. Most conventional farmers continue to be heavily influenced by the research and education agendas of the USDA, the land-grant colleges and universities, and the educational and extension services associated with these institutions. Subtitle C would make it possible for these institutions to be involved in the development of programs of research and education on biological farming systems. Such involvement would likely have at least three positive effects. First, participating scientists and educators would develop a more thorough understanding of, and appreciation for, the potential of reduced input farming systems. Second, it would be reassuring to conventional farmers who are exploring these kinds of technologies to know that their local universities and extension services are involved. Finally, these kinds of programs would help to correct the erroneous perceptions of alternative agriculture currently held by some agricultural scientists, conventional farmers, and consumers.

Second, it is important for the members of this subcommittee to realize that large numbers of farmers are now looking for reliable information on reduced input farming systems. A large proportion of the attendees at the long-running annual alternative agriculture field day at the University of Nebraska are conventional farmers. These farmers are interested in learning how legume-based crop rotations, green manure crops, improved manure and crop residue management, recycling technologies, and more diversified farming systems might help to reduce production costs and control soil erosion and the pollution of underground water supplies caused in part by excessive fertilization, pesticide use, and monocultural cropping systems.

For the past several years, on average, approximately 500 farmers, scientists, and others have attended Richard Thompson's field day held at his farm near Boone, Iowa. Mr. Thompson is demonstrating the cost-cutting and environmental advantages of alternative farming techniques on his 300-acre farm. The response to this field day dramatically illustrates the growing need to provide farmers with reliable information on alternative production systems.

Some three years ago, the Iowa Farm and Rural Life Poll found that nearly half of Iowa's farmers favor allocating more government research money to study the feasibility of organic farming methods. The survey, conducted by the Iowa State University Cooperative Extension Service and the ISU Agriculture Experiment Station, included responses from 1,585 randomly selected Iowa farm families. The question on organic farming research was one of seven dealing with broad agricultural issues. It showed 47 percent favored more funding, 26 percent were uncertain, and 27 percent were opposed.

Since the Institute was founded in 1983, we have received hundreds of inquiries about these same kinds of technologies and concerns. Farmers are particularly interested in the economic benefits and costs associated with reduced input agricultural production technologies. Paraphrasing, the following examples are illustrative of the kinds of questions we have received:

- Can I make money farming with alternative methods?
- How can I control weeds without herbicides?
- How can I control insects and diseases without pesticides and fungicides?
- If I shift to organic methods, what do I do first--how fast can I move?
- If I switch, are there markets for these products?
- Will I have special equipment needs? Tillage? Residue management?
- Are "alternative" products any good? Which ones? How can I be sure?
- What "alternative" crops (e.g.--peas, beans, etc.) can I grow for increased N-fixation?
- What are the best cover and green manure crops for my area? Where do these crops fit into the rotation and how long should they be allowed to grow for maximum benefit?
- What is the best way to handle manure--should I compost? Why?
- Must I have animal units to farm organically?
- What would be the best crop rotation for this area?
- What are the best seed varieties for my area?
- Is no-till possible without the heavy use of pesticides?

While a substantial amount of relevant information in these areas does exist, it is scattered and incomplete. Much of it also may be dated due to various technological advances. In any case, farmers complain that they are unable to get answers to these and similar questions from their local universities and extension services. I have heard of these difficulties repeatedly and often over the past several years in telephone conversations, personal correspondence, and during attendance at scores of meetings. It is important for the Subcommittee to realize that a growing cross-section of American society, including the urban sector, is increasingly interested in these low-chemical systems of farming. A 1984 Food Marketing Institute survey found that more than three out of four Americans consider pesticide residues in their food a "serious hazard."

Third, over the past several years, it has become increasingly clear that a growing number of agricultural scientists are anxious to conduct research on reduced input farming systems. The following selected examples illustrate and underscore these trends.

- The 1981 Annual Meeting of the American Society of Agronomy sponsored and organized a full day symposium entitled "Organic Farming: Current Technology and Its Role in a Sustainable Agriculture." In 1984, the Society published the proceedings of this Symposium which includes fourteen research papers and reivews.

- Iowa State University has held several conferences over the past five years dealing with management techniques in biological farming systems. Earlier this year, ISU announced the establishment of long-term research trials on reduced input systems at its Allee Research Center near Newell, Iowa.

- In 1983, North Carolina State University began offering a credit course entitled, "Alternative Agricultural Systems." Last summer, NC State co-sponsored an alternative farming systems field day with the Carolina Farm Stewardship Association. Plans are underway for a second field day this summer.

- The University of Nebraska's Institute of Agriculture and Natural Resources outlined its assessment of needed alternative agricultural research and education priorities in its 1983 Alternative Farming Task Force Report.

- In 1984, the Agricultural Research Service placed a research scientist at the Rodale Research Center, Kutztown, Pennsylvania. This scientist is studying cropping systems that rely in varying degrees on organic and inorganic fertilizers, crop rotations, and aspects of biological pest control.

- Michigan State University has published the proceedings of a three-day conference on alternative agriculture held at MSU in June of 1984. The book is called Sustainable Agriculture and Integrated Farming Systems.

- The Board on Agriculture of the National Academy of Sciences will soon publish the findings, conclusions, and recommendations of its two-year study on the role of alternative farming systems in modern production agriculture.

- Within the past two years, both the University of Vermont and the University of Maine have inaugurated undergraduate educational programs dealing with reduced input systems.

- The University of California recently hired a statewide coordinator for sustainability programs and has launched a modest competitive grants program for research on sustainable agricultural systems.

- The USDA Cooperative Extension Service has named "alternative agricultural opportunities" as one of eight issues to be addressed by national task force action within Extension during 1987.

- The Institute for Alternative Agriculture has begun publishing a quarterly, peer-reviewed journal, the American Journal of Alternative Agriculture, in order to provide an outlet for the growing number of scientists and educators who are beginning to do research related to reduced input agriculture. Twenty-nine of this Nation's leading agricultural scientists and educators serve on the Journal's Editorial Board.

As these selected examples illustrate, there is no dearth of scientific and farmer interest in reduced input farming systems. The opportunity for assembling top scientists to conduct the research envisaged in this legislation is excellent. Properly funded, Subtitle C could provide an important catalyst for the much-needed development of interdisciplinary, systems-oriented research on reduced input farming methods.

At least two additional positive aspects of Subtitle C deserve special comment. First, this legislation correctly provides for both public and private institutional involvement in the conduct of the research. We believe that the participation of a variety of both public and private agricultural research and education institutions will contribute to the need for perspective and objectivity during the execution and reporting of the proposed research. Second, the interdisciplinary aspects of the information study and the research projects are also appropriate and necessary. Given the agronomic, economic, social, and policy complexities of reduced input farming systems, a broad range of disciplines, working together, affords the best hope for understanding and improving them.

In closing, we urge the Subcommittee to provide $15 million of startup funding for Subtitle C. If adequately funded, this program could help our Nation's farmers reduce production costs, while simultaneously addressing other important needs such as resource conservation, improved environmental quality, and long-term sustainable food production. Given agriculture's current economic crisis, mounting threats to the Nation's soil and water resources, and the continuing demise of our small rural communities and family farms, the need to develop a more balanced agriculture is apparent. We urge the Subcommittee to thoughtfully consider how reduced input systems of production can help provide answers to these and other pressing problems and needs.

THANK YOU

LETTER FROM WARREN S. THOMPSON, DEAN, SCHOOL OF FOREST RESOURCES, MISSISSIPPI STATE UNIVERSITY, ET AL.

Honorary Quentin N. Burdick
United States Senate
511 Senate Hart Office Building
Washington, DC 20510

March 23, 1987

Dear Senator Burdick:

This letter describes the background of Wood Utilization Research Centers funded in FY 1985 under P.L. 89-106, progress to date, and plans for the next four years. We request that this brief report be included in the record of the Senate Agriculture Appropriations Subcommittee hearings.

In 1983, Senators Cochran and Hatfield and Congressman Weaver sponsored a study by the Office of Technology Assessment (OTA) on the economically competitive position of wood-using industries in the United States. Collectively, these industries add over $62 billion to the U. S. economy and annually consume nearly a quarter of a billion tons of wood.

The OTA report concluded that improved processing and harvesting technology offer great potential for expanding the U.S. timber supply and products made from this renewable resource. It stated that the "United States could greatly expand its role in world forest products trade over the next decade ..." The study recommended the creation of two or three national research centers aimed at improved utilization of wood and wood materials.

In response to this study, Congress appropriated funds in FY 1985 to establish research centers in the three major timber-producing regions of the United States, each of which has unique problems and opportunities. The three centers, which were again funded in FY 1986 and FY 1987, are located at Oregon State University, Mississippi State University, and Michigan State University. These schools already had strong programs in wood science and in forestry upon which to build the national research capability to maintain or improve the competitive position of the U. S. wood-using industry.

The programs at all three universities are developing very effectively. Research focuses on cost-effective, environmentally acceptable timber harvesting methods, more efficient wood manufacturing, and improved use of wood products. For example, scientists at Oregon State University are learning about ways to improve residential construction by studying the damping and stiffness properties of nailed joints and by learning more about the behavior of connections between walls and floors under various stresses. Research on high-speed clipping of green veneer in the manufacture of plywood is expected to save the typical mill over $500,000 per year. Oregon State scientists are also making good progress in identifying preservatives that are effective but more environmentally acceptable than existing products.

Mississippi State University has made significant progress in developing a water repellant and stabilizing system to enhance the performance of wood in exterior applications. Scientists there have developed new kiln drying methods which are more energy efficient than traditional drying methods. They have also been able to identify cost-effective, complete biomass utilization systems.

At Michigan State University, research is concentrated on selected advanced technologies that are likely to improve the utilization of eastern hardwoods. High-speed laser cutting of wood for application in furniture manufacturing looks particularly promising. Links are being developed with scientists in the automobile industry in the search for high-performance, light-weight materials having a carbon-fiber base.

Experience with the three centers indicates that their research objectives can largely be completed within four years beyond FY 1987 at the current level of annual funding. By the end of FY 1991, we expect to solve a set of complex technical problems sufficiently definitively to truly influence the productivity of selected U. S. wood-based industries.

It would be helpful if we could obtain an indication of Congressional intent to continue the program for an additional four years. This would enable us to schedule our activities over a sufficient planning horizon that we can be sure that we are involving the best scientific talent available.

Thank you for your consideration of our request. Please let us know if we can provide any additional information on this important national program.

Sincerely yours,

Warren S. Thompson

Warren S. Thompson, Dean
School of Forest Resources
Mississippi State University

George W. Brown

George W. Brown
Associate Dean for Research
College of Forestry
Oregon State University

Larry W. Tombaugh

Larry W. Tombaugh, Head
Department of Forestry
Michigan State University

STATEMENT OF JAMES B. GRANT, EXECUTIVE SECRETARY, NATIONAL ASSOCIATION OF STATE DEPARTMENTS OF AGRICULTURE

MR. CHAIRMAN, AND MEMBERS OF THE SUBCOMMITTEE, I AM J.B. GRANT, EXECUTIVE SECRETARY OF THE NATIONAL ASSOCIATION OF STATE DEPARTMENTS OF AGRICULTURE. I AM PLEASED TO MAKE THIS STATEMENT ON BEHALF OF OUR ASSOCIATION.

NASDA REPRESENTS THE DEPARTMENTS OF FOOD AND AGRICULTURE IN THE FIFTY STATES AND THE U.S. TERRITORIES OF GUAM, AMERICAN SAMOA, PUERTO RICO AND THE VIRGIN ISLANDS. THESE STATE AND TERRITORIAL DEPARTMENTS OF AGRICULTURE WORK CLOSELY TOGETHER.

FIRST I WOULD LIKE TO REITERATE A LONG STANDING POLICY OF NASDA. WE BELIEVE THE FEDERAL DEFICIT SHOULD BE REDUCED AND THAT THE FEDERAL GOVERNMENT, AS WE DO IN THE STATES, SHOULD OPERATE FROM A BALANCED BUDGET. WE HAVE REPEATEDLY SAID WE ARE WILLING TO DO OUR PART IN REDUCING THE NATIONAL DEFICIT. WE STILL MAINTAIN THAT POSITION, BUT WE ARE NOT IN FAVOR OF AGRICULTURE TAKING MORE THAT ITS FAIR AND EQUITABLE SHARE OF THOSE REDUCTIONS. AS IN FY 1987, AGRICULTURE HAS BEEN SINGLED OUT TO TAKE INORDINATE BUDGET CUTS, EITHER BY EXCESSIVE REDUCTIONS OR SUBSTITUTING USER FEES FOR APPROPRIATED FUNDS.

WE BELIEVE THERE IS NO FAIRNESS IN THIS. AGRICULTURE AND RURAL AREAS ARE IN A DEPRESSED CONDITION. DRASTIC CUTS AS PROPOSED IN THE 1988 AGRICULTURE BUDGET WOULD CAUSE MORE HARDSHIPS, PERHAPS ADDING TO THE FAILURES OF MORE FAMILY FARMS. IN ADDITION, MOST OF THE PROGRAMS SLATED FOR MAJOR CUTS, OBLITERATION, OR TRANSFER TO USER FEES ARE FEDERALLY-MANDATED CONSUMER PROTECTION OR SERVICE PROGRAMS, MANY CARRIED OUT COOPERATIVELY WITH STATES AND INDUSTRY. THE JUSTIFICATION BY THE ADMINISTRATION, THROUGHOUT THE BUDGET, IS THAT THE STATES AND/OR INDUSTRY WILL ABSORB THESE PROGRAMS. THIS SIMPLY WILL NOT HAPPEN. THE STATES AND INDUSTRY ARE IN NO FINANCIAL CONDITION TO PICK UP THESE PROGRAMS, NOR SHOULD THEY HAVE TO ASSUME TOTAL RESPONSIBILITY FOR FEDERALLY-MANDATED PROGRAMS. WE RESPECTFULLY REQUEST THAT CONGRESS APPROPRIATE ADEQUATE AND

SUFFICIENT MONIES THAT WILL CONTINUE TO ALLOW THE U.S. DEPARTMENT OF AGRICULTURE TO FULFILL ITS MANDATED OBLIGATION TO AMERICAN FARMERS, RANCHERS AND TO ALL AMERICAN CITIZENS.

COOPERATIVE PROGRAMS

NASDA AND THE STATE DEPARTMENTS OF AGRICULTURE HAVE BEEN WORKING COOPERATIVELY WITH THE ANIMAL AND PLANT HEALTH INSPECTION SERVICE OF THE DEPARTMENT OF AGRICULTURE ON THE ERADICATION OF BRUCELLOSIS THROUGHOUT THE UNITED STATES. OUR EFFORTS HAVE PAID OFF. THE INCIDENCE OF BRUCELLOSIS IS DROPPING IN MANY STATES. HOWEVER, THE ADMINISTRATION IS NOW SEEKING TO REDUCE FUNDING IN THIS IMPORTANT PROGRAM. WE BELIEVE SUCH FUNDING SHOULD BE NO LESS THAN FUNDED IN FISCAL YEAR 1987. ANOTHER IMPORTANT ANIMAL HEALTH PROGRAM--PSEUDORABIES--HAS BEEN SINGLED OUT FOR ELIMINATION IN FISCAL YEAR 1988 BY DENYING IT FUNDING. WE BELIEVE IT WOULD BE IRRESPONSIBLE TO COMPLETELY DEFUND THIS PROGRAM, AND ASK THAT IT BE FUNDED AT A LEVEL NO LESS THAN APPROPRIATED IN FISCAL YEAR 1987. FOR THE SECOND CONSECUTIVE YEAR, THE ADMINISTRATION ALSO HAS CALLED FOR ZERO FUNDING FOR THE IMPORTED FIRE ANT PROGRAM AND THE NOXIOUS WEED PROGRAM. WE CAN SEE NO JUSTIFICATION FOR SUCH DRASTIC ACTION. WE THEREFORE URGE CONGRESS TO RESTORE FUNDING TO THESE TWO PROGRAMS TO AT LEAST THE SAME LEVEL AS APPROPRIATED IN FISCAL YEAR 1987.

COOPERATIVE PROGRAMS, JOINTLY FUNDED AND JOINTLY ADMINISTERED ARE A COST-EFFECTIVE WAY OF CARRYING OUT NECESSARY GOVERNMENT PROGRAMS. THEY HAVE PROVEN SUCCESSFUL AND EFFICIENT OVER THE YEARS. WE BELIEVE THEY MUST CONTINUE ON A COOPERATIVE BASIS, AND ASK YOUR SUPPORT IN ACCOMPLISHING THIS GOAL.

USER FEES

THE ADMINISTRATION'S BUDGET CALLS FOR TOTAL USER FEES TO FUND MANY FEDERALLY MANDATED PROGRAMS. WE ARE OPPOSED TO USER FEES FOR MANDATED FEDERAL PROGRAMS THAT SERVE A BROAD CONSTITUENCY, SUCH AS CONSUMERS AND THE GENERAL PUBLIC. THESE ARE, TO A GREAT EXTENT, PROGRAMS THAT SERVE TO PROTECT THE HEALTH AND WELFARE OF THE

AMERICAN PUBLIC. WE BELIEVE IT IS ONLY FAIR THAT SUCH PROGRAMS SHOULD BE FINANCED BY FEDERALLY APPROPRIATED FUNDS.

FOR INSTANCE, ALL OF THE MARKETING AND INSPECTION PROGRAMS CALL FOR LIBERAL USE OF USER FEES, AS OPPOSED TO APPROPRIATED FUNDS. CONGRESS HAS REPEATEDLY REJECTED THESE USER FEES IN THE PAST, AND WE URGE THAT IT DO SO AGAIN.

IN FISCAL YEAR 1988, THE ADMINISTRATION IS CALLING FOR MORE LINE ITEM REDUCTIONS FOR PROGRAMS OF THE ANIMAL AND PLANT HEALTH INSPECTION SERVICE, AND TRANSFERRING THEM TO USER FEES. WE RESPECTFULLY URGE CONGRESS TO CONTINUE TO FUND THESE IMPORTANT APHIS PROGRAMS AT A LEVEL AT LEAST EQUAL TO THAT OF FY 1987.

ANIMAL DAMAGE CONTROL

NASDA HAS LONG BEEN IN FAVOR OF MOVING THE ANIMAL DAMAGE CONTROL PROGRAMS FROM THE DEPARTMENT OF INTERIOR TO THE DEPARTMENT OF AGRICULTURE. WHEN THE MOVE FINALLY BECAME A REALITY LAST YEAR, CONGRESS APPROPRIATED $22.5 MILLION FOR FY 1987. NOW THE ADMINISTRATION WANTS TO NEARLY CUT THIS APPROPRIATION IN HALF IN FY 1988 BY FUNDING IT AT $12.1 MILLION. WE URGE CONGRESS TO FUND THE PROGRAM AT $26.3 MILLION IN FY 1988. WE BASE THIS FIGURE ON THE RESTORATION OF THE $22.5 MILLION APPROPRIATION OF 1987, PLUS AN ADDITIONAL $3.8 MILLION FOR ENHANCED MIGRATORY BIRD CONTROL, DEVELOPMENT OF NEW COST-EFFECTIVE CONTROL TOOLS, AND RESEARCH ON FOREST DAMAGE.

AFRICANIZED BEES

IN ADDITION, UNITED STATES AGRICULTURE MAY SOON SUFFER TERRIBLE LOSSES FROM THE INFLUX OF THE AFRICANIZED BEE FROM MEXICO. WE ARE REQUESTING THAT THE ANIMAL AND PLANT HEALTH INSPECTION SERVICE AND THE AGRICULTURAL RESEARCH SERVICE RECEIVE A FISCAL YEAR 1987 SUPPLEMENTAL APPROPRIATION OF $8 MILLION IN THE SPRING OF 1987 FOR A BARRIER ZONE TO PREVENT THE INFLUX OF AFRICANIZED BEES INTO THE UNITED STATES.

THE AFRICANIZED BEE IS NOW ESTABLISHED IN SOUTHERN MEXICO AND CAN BE EXPECTED TO ARRIVE IN THE UNITED STATES BY 1989. MODIFICATION OF THE BEES BEHAVIOR HAS NOT CHANGED AS IT MOVES NORTH, THEREFORE STILL MAINTAINING ITS AGRESSIVENESS. THE BEES' ENTRY INTO THE UNITED STATES WILL POSE A SERIOUS IMPACT ON THE BEEKEEPING INDUSTRY. INTENSIVE MANAGEMENT PRACTICES OF BEES WILL BE REQUIRED TO MAINTAIN THE INTEGRITY OF EUROPEAN BEE STRAINS BY COMMERCIAL BEEKEEPERS. SUCH DIFFICULTY IN BEE MANAGEMENT WILL LIMIT BEE COLONIES THAT ARE NECESSARY FOR POLLINATION, THUS AFFECTING AGRICULTURAL PRODUCTION. AN AREA OF EQUAL CONCERN IS THE MASS STINGING FROM FERAL BEES, THREATENING PUBLIC HEALTH. ANY HUMAN DEATHS IN THIS COUNTRY CAUSED BY BEES WILL BE HIGHLY PUBLICIZED BY THE MEDIA, GENERATING PUBLIC HYSTERIA. SUCH MEDIA COVERAGE WILL INVOKE LOCAL ORDINANCES, RESTRICTING THE KEEPING OF BEES.

FOOD SAFETY AND INSPECTION SERVICE

FOR THE FOOD SAFETY AND INSPECTION SERVICE, WE OPPOSE THE ADMINISTRATION'S PROPOSAL TO FULLY FUND THE FY 1988 BUDGET OF $398 MILLION EXCLUSIVELY BY THE USE OF USER FEES. THE ACTIVITIES SUPERVISED BY FSIS CLEARLY ARE MANDATED TO PROTECT THE HEALTH AND WELFARE OF THE AMERICAN PUBLIC. NOTHING COULD BE MORE OBVIOUS. THEREFORE, USER FEES ARE INAPPROPRIATE FOR PROGRAMS FALLING UNDER THE JURISDICTION OF THE FOOD SAFETY AND INSPECTION SERVICE. CONGRESS, IN ITS WISDOM, HAS ALWAYS USED APPROPRIATED FUNDS FOR THIS AGENCY, AND WE RESPECTFULLY URGE THAT IT CONTINUE TO DO SO. FOR FY 1988, WE RECOMMEND THAT FSIS RECEIVE APPROPRIATED FUNDS OF NO LESS THAN APPROPRIATED IN FY 1987.

AGRICULTURAL MARKETING SERVICE

OVER THE YEARS, THE AGRICULTURAL MARKETING SERVICE HAS IMPOSED USER FEES FOR CERTAIN SERVICES THAT BENEFIT THE PRODUCER. NASDA HAS NEVER QUARRELED WITH THIS. HOWEVER, FOR FISCAL YEAR 1988, THE ADMINISTRATION HAS PRACTICALLY ELIMINATED ALL APPROPRIATED MONIES

IN FAVOR OF AN ALMOST TOTAL USER FEE CONCEPT FOR AMS. WE URGE THAT THE SAME MIXTURE OF USER FEES AND APPROPRIATED MONIES IN FY 1987 BE RETAINED FOR FY 1988. THIS WOULD MEAN USER FEES OF $115.1 MILLION AND APPROPRIATED FUNDS OF 42.6 MILLION.

WE ALSO RESPECTFULLY ASK THAT THE FEDERAL-STATE MARKETING IMPROVEMENT PROGRAM BE FUNDED IN FY 1988 AT THE SAME LEVEL AS APPROPRIATED IN FY 1987. THIS IMPORTANT MATCHING FUNDS PROGRAM SHOULD BE CONTINUED. WE URGE YOU TO RESTORE THIS PROGRAM AND GIVE CONSIDERATION IN THE FUTURE TO AN EXPANSION OF THIS PROVEN EFFECTIVE MARKETING TOOL. ANOTHER IMPORTANT PROGRAM FOR STATES IS THE WHOLESALE MARKETING DEVELOPMENT PROGRAM. AGAIN, THE ADMINISTRATION CALLS FOR NO APPROPRIATED FUNDS FOR THIS PROGRAM, AND SUGGESTS THAT IT RECEIVE FUNDING ON A "COST RECOVERY" BASIS FROM THE STATES. WE URGE THAT CONGRESS RESTORE FUNDING FOR THIS IMPORTANT PROGRAM.

FEDERAL GRAIN INSPECTION SERVICE

IN THE CASE OF THE FEDERAL GRAIN INSPECTION SERVICE, INSPECTION AND WEIGHING SERVICE COSTS ARE RECOVERED BY USER FEES, AND ARE MANDATORY AT EXPORT PORTS AND OPTIONAL AT INTERIOR LOCATIONS. THESE USER FEES ARE NECESSARY AND THEREFORE SHOULD BE BORNE BY THE PRODUCER. FOR FY 1988, HOWEVER, THE ADMINISTRATION ALSO WANTS TO SHIFT COMPLIANCE AND STANDARDIZATION ACTIVITIES TO USER FEES. WE OPPOSE SUCH A MOVE. WE RESPECTFULLY URGE THAT YOU RESTORE THE FUNDING OF THESE ACTIVITIES.

AGRICULTURAL COOPERATIVE SERVICE

FOR THE AGRICULTURAL COOPERATIVE SERVICE, THE ADMINISTRATION PLANS TO COMPLETELY CHANGE THE FUNDING FROM APPROPRIATED MONIES IN FY 1987 TO USER FEES IN FY 1988. WE OPPOSE THIS CHANGE, AND RESPECTFULLY RECOMMEND THAT ACS RECEIVE APPROPRIATED FUNDS IN FY 1988 AT NO LESS THAN THE '87 LEVEL.

TODAY, THE AMERICAN FARMER IS BATTLING FOR SURVIVAL. TIMES ARE TOUGH. EACH DAY WE HEAR ABOUT FARMERS LOSING FARMS THAT HAVE

BEEN IN THEIR FAMILIES FOR GENERATIONS, AND FARMERS TAKING THEIR OWN LIVES. NOW IS NOT THE TIME TO DRASTICALLY CUT BACK ON ESSENTIAL AGRICULTURAL PROGRAMS.

FOREIGN MARKET DEVELOPMENT PROGRAM

NASDA HAS BEEN COOPERATING WITH THE U.S. DEPARTMENT OF AGRICULTURE'S FOREIGN AGRICULTURAL SERVICE FOR MANY YEARS IN EXPANDING OUR OVERSEAS MARKETS. THE BIENNIAL NASDA NATIONAL FOOD AND AGRICULTURE EXPOSITION, AN EXCELLENT EXAMPLE, PROVIDES AMERICAN FOOD AND AGRICULTURAL PRODUCERS WITH A UNIQUE OPPORTUNITY TO SELL U.S. FOOD, BEVERAGE, SEED AND NURSERY PRODUCTS TO OVERSEAS BUYERS -- THUS HELPING TO REDUCE DEFICITS WITH OUR TRADING PARTNERS AND MAKING AGRICULTURE AND THE FOOD INDUSTRY IN THE U.S. MORE PROFITABLE. SUCCESSFUL NASDA FOOD EXPOSITIONS HAVE BEEN HELD IN ATLANTA IN 1983 AND KANSAS CITY IN 1985. WE EXPECT TO COMPLETE OUR LARGEST EXPO YET APRIL 29-30 AND MAY 1, 1987, IN SEATTLE, WASHINGTON. OUR SURVEYS SHOW THAT OVER $300 MILLION IN AMERICAN FOOD AND FORESTRY GOODS HAVE BEEN SOLD ABROAD THROUGH THE EFFORTS OF THE FIRST TWO NASDA EXPOS. IT IS A PRIME EXAMPLE OF WHAT CAN BE ACCOMPLISHED THROUGH A COOPERATIVE WORKING AGREEMENT BETWEEN AN AGENCY OF THE FEDERAL GOVERNMENT AND THE STATES. FAS HAS BEEN AN INVALUABLE PARTNER IN THIS EFFORT.

WE COMMEND THE ADMINISTRATION FOR RETAINING THE SAME $49 MILLION IN FUNDING IN FY 1988 AS IT DID IN 1987 FOR THE FOREIGN MARKET DEVELOPMENT COOPERATOR PROGRAM. HOWEVER, WE ARE URGING YOU TO APPROPRIATE $100 MILLION FOR THE FOREIGN AGRICULTURAL SERVICE IN 1988. WE SUPPORT THE PRESIDENT'S BUDGET OF $85.6 MILLION, PLUS AN ADDITIONAL $10.9 MILLION FOR FAS PERSONNEL, $2.4 MILLION IN DEVALUATION ADJUSTMENTS FOR FAS OPERATIONS, $9.1 MILLION TO BRING THE COOPERATOR PROGRAM BACK TO FY 1986 PRE-GRAMM-RUDMAN-HOLLINGS LEVELS, AND $2.0 MILLION FOR THE FOREIGN MARKET DVELOPMENT COOPERATOR PROGRAM AS AN ADJUSTMENT FOR DOLLAR DEVALUATION.

ALTHOUGH WE ARE PLEASED TO SEE THE FOREIGN MARKET DEVELOPMENT COOPERATOR PROGRAM BEING FUNDED AT THE SAME LEVEL AS FY 1987, NASDA HAS LEARNED THAT THE OFICE OF MANAGEMENT AND BUDGET (OMB) WILL TRY TO MAINTAIN THE COOPERATOR FUNDING IN FY 1988 BY DECREASING FUNDING FOR FAS' TARGETED EXPORT ASSISTANCE (TEA) PROGRAM. NASDA BELIEVES THIS WOULD BE A SERIOUS MISTAKE. THE TEA MONEY HAS ALLOWED US TO GREATLY STEP UP OUR PROMOTION OF SALES OF VALUE-ADDED AND FURTHER PROCESSED PRODUCTS OVERSEAS. THESE SALES MAKE GREATER CONTRIBUTIONS TO THE ECONOMY OF THE UNITED STATES BY INVOLVING MORE LAYERS OF PRODUCTION AND EMPLOYMENT. THROUGH THE USE OF TEA MONIES, WE HAVE MADE INROADS TO MARKETS IN EUROPE AND THE FAR EAST THAT OTHERWISE WOULD HAVE BEEN DENIED US. WE BELIEVE THE COOPERATOR PROGRAM AND THE TEA PROGRAM SHOULD EACH BE FUNDED INDEPENDENTLY, AS YOU HAVE DETERMINED. AT PRESENT, $110 MILLION OF TEA FUNDING IS REQUIRED FOR FY 1988. THE ADMINISTRATION WANTS TO REDUCE THESE TEA MONIES $30 MILLION PER YEAR THROUGH 1990. NASDA REQUESTS THAT COMMITTEE REPORT LANGUAGE STIPULATE THAT TEA MONIES WILL BE OBLIGATED AS REQUIRED BY LAW, AND THAT YOU GIVE SERIOUS CONSIDERATION TO EXPANDING THIS VERY IMPORTANT MARKETING PROGRAM.

RESEARCH AND EXTENSION

AS WE MOVE INTO HIGHLY COMPETITIVE WORLD MARKETS NOW AND FOR A LONG-TERM FORSEEABLE FUTURE, IT IS IMPERATIVE THAT WE STAY ON THE FOREFRONT OF TECHNOLOGY AND SCIENCE AS APPLIED TO AGRICULTURE. WE URGE YOU TO CONTINUE YOUR STRONG SUPPORT FOR OUR RESEARCH AND EXTENSION PROGRAMS, WHICH HAVE DONE SO VERY MUCH TO MOVE U.S. AGRICULTURE TO ITS PLACE OF PROMINENCE. WE HAVE THE GREATEST AGRICULTURE IN THE WORLD, AND WE MUST MAINTAIN THAT POSITION. WE RECOMMEND THAT CONGRESS APPROPRIATE $342 MILLION FOR THE EXTENSION SERVICE IN FY 1988, APPROXIMATELY $10 MILLION MORE THAN THE CURRENT ESTIMATE FOR FY 1987.

SOIL AND WATER CONSERVATION PROGRAMS

OUR NATURAL RESOURCES, SOIL AND WATER, NECESSARY FOR A SOUND AND PRODUCTIVE AGRICULTURE, MUST BE PRESERVED. YOUR COMMITTEE HAS LONG BEEN A CHAMPION FOR A STRONG SOIL AND WATER CONSERVATION PROGRAM. WE URGE YOU TO CONTINUE THAT SUPPORT SO THAT THE FUTURE NEEDS OF U.S. AND WORLD AGRICULTURE CAN BE MET. NASDA RECOMMENDS FISCAL YEAR 1988 FUNDING FOR SOIL AND WATER CONSERVATION PROGRAMS AT NO LESS THAN THE SAME LEVEL APPROPRIATED IN FY 1987, PLUS AN AMOUNT NECESSARY TO FULFILL OBLIGATIONS INCURRED BY THE CONSERVATION RESERVE PROGRAMS.

FDA CONTRACTS WITH STATES

SINCE 1973, THE FOOD AND DRUG ADMINISTRATION HAS CONTRACTED WITH STATE DEPARTMENTS OF AGRICULTURE AND OTHER STATE AGENCIES FOR THE PERFORMANCE OF FOOD, FEED AND MEDICAL EQUIPMENT INSPECTIONS BY STATE PERSONNEL. THIS ARRANGEMENT SAVES TAX DOLLARS BECAUSE IT PERMITS A MORE EFFICIENT USE OF STATE INSPECTORS AND CUTS FDA PERSONNEL COSTS. FDA CONTRACTS WITH STATES ARE FUNDED THROUGH THE AGENCY'S FIELD OPERATIONS BUDGET. THE 1987 BUDGET FOR THIS IMPORTANT PROGRAM WAS $4.5 MILLION, AND WE RESPECTFULLY REQUEST NO LESS THAN THIS AMOUNT FOR FY 1988.

CONCLUSION

ABRAHAM LINCOLN CALLED THE DEPARTMENT OF AGRICULTURE THE "PEOPLES DEPARTMENT." SURELY THAT HAS BEEN THE CASE SINCE IT WAS ESTABLISHED. WE REMEMBER, MR. CHAIRMAN, SEVERAL YEARS AGO WHEN LEGILSATION WAS INTRODUCED IN THE CONGRESS OF THE UNITED STATES TO ABOLISH THE DEPARTMENT OF AGRICULTURE AND MOVE ITS NECESSARY FUNCTIONS TO OTHER AGENCIES OF GOVERNMENT. THE IDEA WAS SOUNDLY REJECTED, AS IT SHOULD HAVE BEEN. NOW, IN THE ACT OF BALANCING A BUDGET, WE ARE FACED WITH THE VERY SAME CONSEQUENCES. TO ELIMINATE THOSE PROGRAMS THAT HAVE SO WELL SERVED THE AMERICAN FARMER, RANCHER AND THE CONSUMING PUBLIC OF THIS GREAT NATION, WOULD

DESECRATE PRESIDENT LINCOLN'S DEPICTION OF USDA AS THE "PEOPLES DEPARTMENT."

SURELY, THE FEDERAL DEFICIT MUST BE REDUCED AND WE MUST ALL MOVE TOWARD A BALANCED FEDERAL BUDGET. THIS WILL NOT HAPPEN JUST BY DRASTICALLY CUTTING THE USDA BUDGET OR BY TRANSFERRING FUNCTIONS TO USER FEES. AGRICULTURE IS OUR LARGEST AND MOST IMPORTANT INDUSTRY AND WE MUST TREAT IT AS SUCH.

YOU HOLD THE FUTURE OF AGRICULTURE PROGRAMS, NECESSARY PROGRAMS, IN YOUR HANDS. IT IS A TREMENDOUS RESPONSIBILITY. WE STAND READY TO ASSIST YOU IN ANY WAY WE CAN. THANK YOU FOR THE OPPORTUNITY TO COMMENT.

LETTER FROM WAYNE A. BOUTWELL, PRESIDENT, NATIONAL COUNCIL OF FARMER COOPERATIVES

May 12, 1987

The Honorable Quentin N. Burdick
Subcommittee on Agriculture, Rural
Development, and Related Agencies
Senate Appropriations Committee
140 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Mr. Chairman:

On behalf of the National Council of Farmer Cooperatives, I would like to take this opportunity to comment on the funding for Fiscal Year 1988 of certain Department of Agriculture programs falling under the jurisdiction of the Subcommittee on Agriculture, Rural Development, and Related Agencies. If possible, we request that our comments be included as part of the hearing record.

First, we strongly support continued funding for USDA's Agricultural Cooperative Service (ACS) and oppose the implementation of user fees. ACS provides necessary and valuable research, analysis, technical assistance, and education for farmer cooperatives and their farmer-owners in meeting the challenges taking place in a rapidly changing U.S. agricultural economy. In addition, ACS also provides these and other needed services to assist new cooperatives in organizing and getting established.

Second, we would also like to express our strong support for funding of various programs within the Foreign Agricultural Service (FAS). In particular, the Cooperator Market Development Program and the Targeted Export Assistance (TEA) Program both have had remarkable success in moving U.S. farm exports.

The cooperator program has greatly enhanced market development efforts for many agricultural cooperatives and encouraged them to invest in long-term commitments in order to develop and maintain future markets. This has been accomplished despite the severely limited funding the program has experienced in recent years. Given the need for vigorous market promotion to help overcome agricultural marketing barriers and restraints abroad and also to maintain our overseas presence, a higher funding level in this program is clearly needed.

The Targeted Export Assistance (TEA) program has been extremely successful in moving U.S. agricultural exports as a way to counteract unfair trading practices abroad. Indeed, without TEA funding, a number of U.S. agricultural commodities would not have posted the sizeable export gains in dollar value that has occurred over the past year. Even greater gains are expected as TEA becomes more established.

Finally, while the Foreign Agricultural Service has successfully carried out these two programs, we believe additional personnel and resources may be needed for it to fully administer the broad range of export authorities provided under the 1985 Farm Bill and pending trade legislation. For this reason, we urge that the subcommittee consider an increase in funding to provide for additional FAS personnel.

Mr. Chairman, we appreciate the opportunity to offer our views on these important USDA programs and commend you for your strong leadership on behalf of American agriculture.

Sincerely,

Wayne A. Boutwell
President

STATEMENT OF DONALD LONG, PRESIDENT, NATIONAL DAIRY HERD IMPROVEMENT ASSOCIATION, INC.

SUMMARY

I am Donald Long, President of National Dairy Herd Improvement Association, Inc. which represents 64,000 dairy farmers enrolled in the National Cooperative Dairy Herd Improvement Program.

The National Dairy Herd Improvement Association believes it is in the best interest of dairy farmers, taxpayers and government to continue support for dairy product research, and dairy production efficiency research. National DHIA, the dairy industry, and the Forum for Animal Agriculture encourage "product research and distribution research" as the highest priority dairy research. The events of the past year continue to demonstrate the dairy industry needs to expand its markets by developing new products, improving its efficiency in distributing products, and abandoning the obsolete marketing practices which encourage the production of water and butterfat.

On the other hand, production efficiency should not be permitted to stagnate by abandoning production efficiency research. Eventually, dairy farmers in the United States need to become so efficient they can compete in the **world** market.

We ask your consideration of the following efforts which contribute to the efficiency of the dairy industry:

a) Funding for dairy product research and processing/distribution efficiency;

b) Policies which encourage expansion of dairy product markets, including higher minimum standards and component pricing;

c) Continued support for research which leads to improved production efficiencies, including research efforts in mastitis control, reproduction problems, and genetic improvement.

National DHIA appreciates the support of Congress and the USDA in recognizing the change in priorities for research and thus redirecting funds to dairy product research in the Agriculture Research Service of USDA. We are grateful for the industry-wide effort on dairy products research made by the National Dairy Board.

STATEMENT

I am Donald Long, Weyauwega, Wisconsin. My brother and I farm in partnership at Weyauwega. We operate a 250-cow registered Holstein farm. I am president of the National Dairy Herd Improvement Association, Inc. (National DHIA), which represents 64,000 dairy farmers enrolled in the National Cooperative Dairy Herd Improvement Program (NCDHIP). The NCDHIP provides computerized dairy farm management data; the program is the basis for national genetic evaluations; it provides information for sound artificial insemination and breed improvement programs. It is the basis for many research and education programs. We appreciate the support of the U.S. Department of Agriculture in these programs.

For several years, dairy farmers in National DHIA have urged a redirection of funding to support dairy product research to improve per capita consumption of dairy products. In the long run, along with the whole-herd buy-out, government expenditure for research to expand markets is much more rational than purchase of surplus products.

Even with improvements in marketing efficiency, dairy farmers must continue to improve production efficiency. Eventually, dairy farmers in the United States need to become so efficient they can compete in the **world** market.

In addition, the dairy industry and the Forum for Animal Agriculture (an alliance of 24 livestock organizations representing dairy, beef, swine, sheep, houses, poultry, dairy goats and small meat animals) have been on record supporting "product research and distribution efficiency" as the highest priority research. Specifically, we believe emphasis should be given to the following area:

1. Food safety, including increased emphasis on education and training.

2. Animal health, including restoration of P.L. 1433 funding and special grants.

3. Fundamental research on genetic control and regulation of animal growth, composition, and physiological functions.

4. Fundamental research to enhance nutritional benefits of animal foods including nutritional influences on composition and disease.

5. Continued funding of Food Animal Residue Avoidance Databank (FARAD) in the Food Safety Inspection Service budget.

6. Continued support for the concept of research on livestock resource management.

PRODUCT RESEARCH

National DHIA continues to urge product research for a number of rational reasons:

a. The nutritional well-being of children who increasingly are addicted to soft drinks;

b. Assurance that the marketing system emphasizes quality and product saleability;

c. Development of new products to increase consumption of dairy products and reduce expenditures for storage of surplus products;

d. Continued efforts to reduce cost of processing, storing, and transporting milk and milk products; and

e. Benefits received by consumers as well as producers from product research.

Following is a list of high priority research project needs:

a. Genetic engineering to improve dairy products.
b. Concentration of milk at the farm level.
c. Ultrapasteurization and aseptic packaging.
d. Ultrafiltration for yield improvement in cheese.
e. Concentration of whey at its place of origin.
f. Whey utilization for food and non-food.
g. Milk quality uniformity.
h. Milk fat utilization

In recent years, the U.S. Department of Agriculture, faced with mounting surplus dairy products, has indicated a willingness to support product research. We appreciate this support and believe continued effort is in the best interests of farmers, consumers, and taxpayers.

PRODUCTION EFFICIENCY RESEARCH

Although production efficiency of the dairy industry far surpasses its marketing efficiency, efforts must continue to improve efficiency at the farm level. Research should continue, too, because there is a long lead-time from research initiation to farm adoption of new techniques. Dairy farmers hope

Congress will continue to encourage maximum productive efficiency. Both farmers and consumers benefit.

Mastitis Research

Mastitis is the primary disease problem of dairy cattle (cost $1 billion annually).

Some believe mastitis control is merely an application of current knowledge, but dairy farmers believe only a small part of needed research has been completed. As herd size increases and mechanization/automation takes place, research and information are more essential than ever. As an example, DHIA dairy farmers pay for monthly mastitis detection on 3 million cows. Follow-up research and communication are essential to supplement the detection system.

The following mastitis research needs were developed by the National Mastitis Council:

1. **Milking Equipment and Mastitis**

   There are few reliable data defining characteristics of milking machines that influence incidence and severity of mastitis.

2. **The Dry Period and Mastitis**

   New methods of treatment and prophylaxis in the dry period are needed.

3. **Specific Immunity and Immunization**

   There is need for study of mechanisms of immunity and potential effective vaccines.

4. **Non-Specific Resistance**

   Resistance research areas include integrity of the teat canal barrier to infection, phagocitosis in the mammary gland and various antibacterial factors in milk and dry period secretions.

5. **Integrated Mastitis Control Program**

   Development of integrated mastitis control systems requires validation of management practices which minimize the incidence of clinical mastitis, the level of subclinical infection and production loss.

Reproduction Research

Dairy farmers consistently rate the need for reproduction research second only to mastitis. Farmers rate reproduction research priorities in this order:

1. Estrus Detection
2. Retained Placenta
3. Cystic Ovaries
4. Abortion-Embryonic Death
5. Reproductive Disease (bruccellosis, leptospirosis, vibriosis, low-grade infection, etc.)

National DHIA and dairy farmers appreciate the response of the U.S. Department of Agriculture and the scientific community in developing the national project Integrated Reproduction Management so farmers have available a package which solves problems at the farm level. We encourage continued development.

Genetic Research

National DHIA appreciates the support of Congress and the U.S. Department of Agriculture in maintaining dairy research at the Animal Improvement Program Laboratory. Resulting dairy cattle sire and cow evaluations have contributed significantly to production efficiency progress in dairy. To ensure continued genetic improvement, DHIA dairy farmers encourage the continuation of this important research.

SUMMARY OF RESEARCH AND EXTENSION PRIORITIES

1. Dairy Product Research/Processing-Distribution Efficiency
2. Mastitis Research
3 Reproduction Research
4. Genetic Research

STATEMENT OF ROBERT A. DENMAN, DIRECTOR OF WASHINGTON OPERATIONS, NATIONAL FARMERS UNION

At the 85th annual convention of National Farmers Union, held in Fort Worth, Texas, March 1-4, 1987, the delegates and members of the National Farmers Union adopted several statements which have a bearing upon the federal budget generally and the USDA budget in particular.

The full text of these planks appear in the exhibits attached, where they may be examined in full. They are summarized here for quicker reading and appraisal:

+ The Gramm/Rudman "Balanced Budget and Emergency Deficit Control Act of 1985" is an unworkable, dangerous law, transferring huge powers from the Congress to the Executive branch, and likely to fail miserably in its aim of balancing the federal budget by 1991. Gramm/Rudman should be repealed.

+ The American people want the same "pay-as-you-go" system, with which they live, to apply to the federal government. Income should exceed outgo if we are to balance the budget and reduce the federal debt.

+ A balanced federal budget will come only from a revitalized national economy and full employment.

+ In 1987, Congress will again have to act on the federal debt ceiling, for the twelfth time in the Reagan Administration.

+ Gross interest outlays of $200 billion a year make it clear that a large part of the existing deficits are related to interest outlays on the public debt, due to the refusal of the Executive branch to bring interest rates down to a reasonable level. The interest outlay hemorrhage is a ghastly self-inflicted wound to the national economy and the federal budget.

+ Authority for budget-making should be returned to the appropriations and legislative committees and the provisions of the 1974 Budget Act creating the House and Senate Budget Committees and the budget reconciliation process should be repealed.

+ Federal budgets should be constructed and adopted on a biennial basis.

+ A "capital budget" should be established separate from the annual operating budget to contain all long-term credit programs and investments in public improvements.

+ Social Security should be removed at once from the unified federal budget and should function as an indepeendent federal agency.

+ The Administration's proposed budget reductions and terminations for USDA purposes are harmful, unacceptable and should be denied by the Congress.

The National Farmers Union has expressed its concern over the costs of the current programs under the 1981 and 1985 Farm Acts. Never has so much been spent to do so little good to the agricultural economy.

The 1986 cost of operations under the 1985 Farm Act ran about $25.8 billion, ten times the cost in the later 1970's and 25 times the average cost in the 40-year period from 1933 to 1973 when supply management types of programs were available.

Administration officials contend that if they are given authority to reduce CCC loan rates and target payment rates, the Treasury outlays for farm programs can be reduced somewhat.

But, it is acknowledged even by proponents of the Administration farm policy that costs of the program under the 1985 Farm Act will continue near the $20 billion a year level through the life of that statute.

It must be understood that while a continuation of the 1985 Farm Act, or its modifications desired by the White House, will continue to be very costly, the result will be to further depress farm prices and net income.

National Farmers Union has characterized the Food Security Act of 1985 as "the most expensive, the most complicated, and the least effective farm law in modern agricultural history."

Farmers Union has called for a major redirection of agricultural policy which will raise farm prices and income, enhance export earnings, and bolster the rural and national economies.

Such an option is available in the Family Farm Act sponsored by Senator Harkin and Congressman Gephardt. Through use of a "managed abundance" approach proposed in that legislation, farm prices and net income can appreciably be raised at perhaps only half the cost of the current program.

Another proposal, the Dorgan/Penny bill to target farm program payments to family-scale farm operations would also improve total net farm income and provide substantial Treasury savings compared to the 1985 Farm Act.

Members of the House and Senate Appropriations Committees need to thoughtfully consider both the Treasury savings and the farm income improvement available by shifting to the "managed abundance" concept proposed in the Family Farm Act.

Provisions in the 1987 Policy Statement of National Farmers Union adopted March 4, 1987, Fort Worth, Texas, relating to federal budget matters follow:

EXHIBIT A

GRAMM/RUDMAN AND THE FEDERAL BUDGET

The experience of 1986 proves that the "Balanced Budget and Emergency Deficit Control Act of 1985", P.L. 99-177, is an unworkable, unconstitutional, and dangerous law which will transfer huge powers; from the Congress to the Executive branch and will likely fail miserably in its aim of balancing the federal budget by 1991.

It was adopted in a situation of total frustration resulting from inability of the Executive branch and the Congress to move towards a "pay-as-you-go" approach to public finance.

The White House has kept deficits high in order to exert maximum pressure on funding programs it does not like. Defense outlays were rapidly enlarged, while the revenue side was first depleted by unwarranted tax breaks for the wealthy and the corporations, and then marked "off-limits."

We believe the American people want the same "pay-as-you-go" system, with which they live, to apply to the federal government.

Future reductions in budgets for agriculture, employment programs, social services, education, housing and health -- whether implemented by the regular budget process or Gramm/Rudman -- will likely enlarge the federal deficit rather than minimize it. A balanced federal budget will come only from a revitalized national economy and full employment.

EXHIBIT B

THE FEDERAL DEBT

By May, 1987, the Congress will again have to act on the federal debt ceiling. One of Ronald Reagan's first acts as President in 1981 was to ask Congress to raise the debt limit to $985 billion, and he has since asked for further increases ten additional times.

One of the major factors in this doubling of the public debt has been the refusal of the Executive branch to do anything to bring basic interests down to a reasonable level. Interest outlays on the federal debt were wastefully high at $75 billion in 1980. For FY 1987, gross interest outlays are projected at $207.1 billion. This shows that more than half of the existing deficits are related to interest costs -- a ghastly self-inflicted wound to the economy and to the budget.

EXHIBIT C

FEDERAL BUDGET REFORM

The federal budget process is not working effectively, partly because of structural problems and partly due to bad economic and monetary policy. It is not achieving a "pay-as-you-go" system. To cure the structural failings, we propose:

1. The Gramm/Rudman Deficit Reduction Act should be repealed.

2. The authority for budget making should be returned to the appropriations and legislative committees by repealing provisions of the 1974 Budget Act which created the House and Senate Budget Committees and established the budget reconciliation process. The Congressional Budget Office, however, should be retained to offset the mischief wrought by the Office of Management and Budget (OMB).

3. The 1974 Budget Act should be amended to provide for biennial budgets so that deficit controversies do not continually overwhelm other needful business of the Congress.

4. All long-term credit programs, permanent and long-term improvements, multi-purpose dams, conservation and watershed projects, public buildings, highways and inland

waterways, should be placed in a "capital budget" distinct from the annual operating budget.

5. Although the Gramm/Rudman Act removed the Social Security program from the federal budget, it continues administratively as a part of the Department of Health and Human Services. We urge Congress to establish Social Security as an independent federal agency, administered by a bi-partisan board.

6. We oppose adoption of authority for a Presidential line-item veto. Such a law would simply enable the White House to impose its sense of priority on the country.

EXHIBIT D

USDA BUDGET FOR FISCAL 1988

The Reagan Administration budget for USDA for FY 1988 proposes to reduce outlays by $4.3 billion or almost 8 percent. Price support outlays will be down by $3.3 billion. This assumes that the Congress will accept the White House request for authority to cut target prices by 10 percent a year and to cut CCC loan rates by up to 10 percent a year.

Soil conservation funding would be largely eliminated with the exception of the new Conservation Acreage Reserve. The ACP, Great Plains, watershed, waterbank, and emergency conservation activities would be terminated.

Rural electrification and telephone loans would be shifted to the private sector in 1988.

The P.L. 480 program would be reduced by about $76 million for 1988 and the export credit program would be cut by $2 billion.

The Food Stamp program would be cut by about $200 million and the Child Nutrition programs by about $846 million. Marketing and inspection services would be reduced by about $500 million by charging heavier user fees

The above reductions are harmful and unacceptable. Congress should provide ample funding for all existing services.

EXHIBIT E

CROP INSURANCE

We urge continued support of Congress and USDA to improve and expand crop insurance on an acturially sound basis but protected by federal funds if natural disasters should threaten the crop insurance programs available to all producers.

We continue to support the federal subsidy of the rates and operating expenses.

EXHIBIT F

AGRICULTURAL CENSUS

We favor the provision of adequate appropriations so that the agricultural census can continue to be taken at 5-year intervals, rather than the 10-year interval recommended by the Administration. The conditions of America's family farmers have been and will continue to change so rapidly that a census taken only at 10-year intervals would be of limited value.

EXHIBIT G

GRAIN INSPECTION

We continue to oppose the imposition of user fees for the inspection and grading of agricultural commodities. Federal inspection and grading of such commodities is in the public interest and should not be charged to the producer.

EXHIBIT H

USDA'S INFORMATION MANDATE

We oppose charging user fees for formerly-free USDA reports and information or supplying them only on a paid basis by computer. The vital importance information plays in the lives of American farmers has been recognized since the inception of USDA in 1862. When USDA was formed, one of the two duties given to it by the Congress was "to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of that word."

Historically, information and reports developed by USDA have been made available free of charge to assure their wide distribution and availability. By changing the policy to a paid subscription basis. USDA has turned its back on one of its first responsibilities mandated by the Congress. We call upon the USDA to reverse this policy.

EXHIBIT I

FEDERAL FINANCE BANK

The Federal Finance Bank is an off-budget instrumentality which helps expedite the insured and guaranteed loan programs of such agencies as the TVA, the Rural Electric and Telephone programs, the FmHA, and student loan programs. Most of these loan programs are at market rates or related to the cost of money to the government.

The White House proposal for a reduction in the volume of these loans, therefore, will not result in major savings to the Treasury Department, but will force these borrowers to seek funds in the money markets with many non-essential borrowers. The change will tend to nullify in part the most important function of the Federal Finance Bank which, in a sense, is to allocate credit to most productive and essential uses, such as food production, electrification and housing.

Statement of Deon D. Stuthman, Chair, Legislative Committee, National Oat Improvement Council

This statement is presented on behalf of the National Oat Improvement Council (NOIC), the U.S. component of the American Oat Workers' Conference (AOWC). The AOWC is an organization open to all oat researchers and educators in North America, both public and private. The primary purpose of both organizations is to facilitate communication among scientists who are working, through their specialities, to improve the efficiency and quality of oats production. Ultimately their successful efforts will be translated into more and better nutritious food for North American people.

Plant germplasm (crop seeds) is one of the natural resources essential for survival along with water, soil and air. Thus the USDA-ARS Plant Germplasm Program plays a vital role in the future food, feed, and fiber production capacity of this nation. Resources expended in this important area should not be considered expenses but rather a wise investment in the future well being of our nation. For all too long plant germplasm efforts in the USDA have been under-funded. Since its inception nearly a decade ago, the NOIC has repeatedly urged increased appropriations for the USDA-ARS Germplasm Program.

The U.S. collections of plant species reduce the leadtime required by plant breeders and colleagues to respond with new varieties when a new circumstance threatens the continued successful production of a given commodity. The United States is a "have not" nation for plant germplasm because less than 5% of the foods we consume come from plants that are indigenous to our country. Thus it is essential that we not only collect these plant species wherever they can be found, but that we also evaluate what has already been collected enabling us to determine where gaps exist. The evaluation serves a second, important function, i.e. to provide information to plant researchers as to which genes are present in a particular species collection and to identify the specific entry(s) containing specific genes of interest.

The NOIC strongly endorses the Administration's proposal to increase the support for the Plant Germplasm Program in the FY 88 USDA-ARS budget by nearly $7 million. Further we strongly endorse the Administration's proposal for $1 million planning money for construction of an urgently needed addition to the currently inadequate National Seed Storage Laboratory at Fort Collins, Colorado. The purpose of this facility is to be a backup and an "archival" storage for the various "working" germplasm collections located around the country. Thus, this facility is much like an insurance policy in that we hope that we never have to (use) it but when the need is there, a reliable genetic source will be available for our continued well being. No other facility in the world serves this role in such a comprehensive manner.

There is one item in the Administration proposal for the Plant Germplasm Program that we cannot support. The FY 88 budget proposes that the USDA collect "user fees" on germplasm orders. In general our group is not opposed to the user fee concept for government services, but we believe the fees should not be applied in this case. Relative to plant germplasm and the food system, the ultimate benefiter is the consumer, therefore, it is appropriate to support our country's germplasm effort with federal tax dollars.

As a practical matter there is another reason for rejecting user fees in the germplasm arena. As mentioned earlier the United States is a "have not" nation for indigenous plant germplasm. We already can predict the reaction of other countries when they learn that the U.S. will be charging for something collected free-of-charge from their country. Heretofore, we have enjoyed easy access to indigenous germplasm in the "have" nations with few obvious current exceptions, e.g. Afghanistan. A user fee would seriously threaten that freedom. Therefore, we strongly urge that the user fee proposal on plant germplasm not be adopted because it will hinder further access to the rich genetic resources of the world.

Thank you.

STATEMENT OF THE NATIONAL PEACH COUNCIL

REQUEST FOR $200,000 FOR THE USDA SOUTHEASTERN FRUIT AND TREE NUT RESEARCH LABORATORY IN BYRON, GEORGIA, TO INITIATE A ROOT STOCK DEVELOPMENT PROGRAM AND HIRE A ROOTSTOCK HORTICULTURIST

BACKGROUND

National Peach Council is a nationwide non-profit association representing peach producers and persons in allied industry.

Peaches are grown commercially in 32 states. The first six states listed in order of production are: California, South Carolina, Georgia, New Jersey, Pennsylvania, and North Carolina. In a good crop year, 3 billion pounds of peaches are produced and valued at approximately $360 million. Over one half of the fresh market peaches produced are grown in the southeast. Peach producers, especially in the southeast, have experienced crop and tree losses due mainly to early spring freezes and peach tree short life. Losses of trees and product are not only an economic loss to the growers, but also a loss of a nutritional product to the American consumer.

USDA/Agricultural Research Service has been diligently working on these problems that cause production losses, and the fresh peach industry is very appreciative of appropriations provided to USDA/ARS specifically for peach research projects.

The Southeastern Fruit and Tree Nut Research Laboratory was established in Byron, Georgia, in 1965. USDA laboratories located at Albany and Fort Valley, Georgia, were consolidated at the new site to make up the staff. During its history, Byron and its parent locations have made many outstanding contributions to agriculture. Approximately 40% of the peach cultivars planted in the southeast were developed at Byron, as well as many of the production techniques and controls used for diseases and insects. Despite its excellent track record, there was not a significant increase in budget at Byron until 1985 when $90,000 in new monies were provided, but this was off-set by Gramm-Rudman-Hollings Amendment in 1986.

However, the cost of conducting research has increased greatly, as well as the complexity of research needed to support the industries. Currently, 6.5 scientists are at Byron working on fruit research and they are one of the youngest, most dynamic staffs within the Agricultural Research Service. The station has 1163 acres of land, plenty of water, and is located within a major peach producing area. We believe the USDA-ARS is trying to face the many problems encountered in fruit production; the effort will fall short unless additional appropriations are provided to support the research already in progress and to establish important new thrust areas.

SPECIFIC NEEDS

The most important need is to increase the life of peach trees. Peach tree life can be lengthened by solving the problems of (a) peach tree short life and (b) root rot. Peach tree short life involves an interaction between cold weather, bacterial canker, and ring nematode, while root rot involves several different species of fungus. The combination of these diseases, nematodes, and insects has made peach production nearly unprofitable in the Southeast.

In the last 10 years, peach acreage has decreased by 40% and tree life now averages about 8 years. The effort at Byron now directed specifically toward early tree death consists of 2.5 scientists and a direct budgetary commitment of about $260,000. This effort is not commensurate with the importance of the problem and long-term solutions are not likely to result unless more is spent each year. However, they cannot direct more into this priority because of the many other important peach research priorities.

The USDA-ARS Laboratory in Byron has the physical facilities necessary for this research, but an additional staff member and dollars to support this new scientist is needed. **The need is for a horticulturist to work solely on the development of root stocks that have resistance to peach tree short life and root rot as the goal. The dollars needed to support the position and improve overall funding are $200,000. These dollars and position are desperately needed to provide the new research necessary to solve the major problems facing the peach industry in the Southeast.**

National Peach Council thanks the committee for the opportunity to present testimony, and ask that our request for an additional investment of $200,000 to hire a rootstock horticulturist and support ongoing research efforts at the Southeastern Fruit and Tree Nut Research Laboratory in Byron, Georgia, be given serious consideration.

STATEMENT OF ROBERT A. RAPOZA, LEGISLATIVE DIRECTOR, NATIONAL RURAL HOUSING COALITION

Mr. Chairman, my name is Robert A. Rapoza and I am the legislative director of the National Rural Housing Coalition (NRHC). NRHC is a national membership organization which lobbies on rural housing and community development programs. We have testified before this subcommittee many times in the past and appreciate the opportunity to submit this statement.

The President's Fiscal Year 1988 budget will bring to an end federal rural development program administered by Farmers Home Administration (FmHA). FmHA administers loans, grants and related assistance for housing and community facilities for low income rural people and their communities. The President proposes to replace some $2.3 billion in rural housing lending and related assistance with about $375 million in vouchers. Both rural housing and community facilities have been greatly reduced in previous fiscal yearural housing lending was reduced by about 40% in FY '86. A proposed negative supplemental appropriation of $1.5 billion will drop the '87 lending to $500 million, a reduction of 75%.

Approval of the FY '87 and '88 proposals will see a reduction and termination of a rural housing program of $4.5 billion in FY '81 to $500 million in FY '87 and zero in FY '88.

The President's budget also calls for a rescission of $79 million in rural water/waste water grants and a negative supplemental of some $300 million in rural community facility lending. These programs, currently at about $500 million, provide financing for water-saver facilities in rural communities. In FY '81 funding for these programs stood at $1 billion.

If the FY '87 negative supplemental is not approved, FmHA will assist over 65,000 disadvantaged and elderly families and FmHA housing assistance will create thousands of jobs in rural America. Some 800 rural communities will also receive loans and grants to provide clean drinking water.

In addition to these actions, the Administration also proposes to rescind 79.6% of FY '87 rural housing grant programs for very low income households and terminate these programs in FY '88. Self help technical assistance, preservation grants, low income repair grants and farm labor grants lose some $35 million in FY '87 funding and are terminated in FY '88.

The Administration proposes 20,000 housing vouchers for rural areas in FY '88. However, the Administration also proposes an end to the rental assistance program which aids very low income households living in rural rental housing.

In FY '88, between 12,000 - 15,000 rental assistance contracts will expire. FmHA will be forced to use between 60 - 75% of the vouchers available to continue existing commitments.

The bulk of FmHA funding is in the form of subsidized loans. About $1.4 billion is provided for single family loans under Section 502 of the Housing Act of 1949. Close to 90% of 502 loans are in rural areas with populations of less than 10,000. The average annual income of Section 502 is about $11,000 and the law requires that 40% of Section 502 mortgage aid go to very low income households (50% of median).

The Section 515 loan program provides reduced interest loans to public and private sponsors to finance the acquisition, construction and repair of multi-family housing for low income and elderly households. The average annual income of Section 515 tenants is about $8,000. About 40% of all Section 515 units are occupied by elderly households.

The default rate on rural housing loan programs is less than 1%. The 90 day delinquency rate in rural housing loans is 1.1%. Since its inception, some 2 million economically disadvantaged families have gained decent housing through FmHA housing assistance.

During the period between 1970 and 1980 the incidence of substandard housing in rural America dropped by 42%. It is no coincidence that this drop in bad rural housing occurred as federal rural housing loans and related assistance programs were on the rise. Termination of these programs means an end to the progress made in solving the rural housing problem.

Rural Housing Need

By any measure, there is a severe shortage of adequate affordable housing in rural America. A 1986 Agriculture Department study shows that over 2 million rural families live in substandard housing. Over 7 million households live in substandard housing in non-metro areas.

In addition, there is a serious lack of credit in rural America. National per capita deposits in rural S&Ls are only about half that of metro areas and 500 rural counties have no federally chartered S&Ls. Where private credit is available it is generally at higher rates and less favorable terms than in urban areas.

The farm crisis has exacerbated the lack of credit in rural areas. Agricultural banks, those with at least 17.5% of their loans to agriculture, constitute about 55% of all banks but accounted for more than half of the bank failures in 1984.

In rural America, subsidized credit is absolutely essential to improving housing for the poor. The high incidence of substandard housing as measured by lack of complete plumbing, lack of adequate drinking water, inadequate heat and inadequate waste disposal facilities makes a production and repair program, such as that administered by FmHA, essential.

Selected Housing Characteristics for Rural Areas

	Units	% Rural
Units lacking complete plumbing	1,302,767	55.8
Units lacking adequate drinking water	2,604,225	92.1
Units lacking adequate heat	4,446,102	54.1
Units lacking adequate waste disposal	16,960,631	75.4

Source: 1980 Census

Administration Proposal

The Administration's budget would change the emphasis of federal rural housing policy from new construction and substantial rehabilitation to a program which assists families in meeting their housing costs. Rural housing production would drop from almost 70,000 units to 0. New households assisted will fall from about 60,000 in FY '87 to less than 10,000 in FY '88.

The Administration proposal is based on the premise that there is an adequate supply of standard housing available to rent in rural America. This is not the case. There is a disproportionate amount of substandard housing in rural America. Some 38% of the nation's bad housing is in rural areas, and according to the Congressional Research Service, rural rental housing is twice as likely to be substandard as rental housing in big cities. The lack of adequate rental housing means that voucher assistance is not, by itself, an adequate response to the rural housing problem. New housing and home repair provided by FmHA are critical to providing low income people with decent housing.

In addition, the Administration's proposal will not provide for the 20,000 units proposed. Accounting for expiring rental assistance commitments, no more than 8,000 vouchers will be available.

Finally, vouchers are not the lowest cost measure of assistance for low income housing. A interim study by the Housing Assistance Council indicates that the subsidy cost of the Section 502 program -- $2,900 in the first year and dropping to an average of $890 per borrower -- compares favorably with the cost of the voucher: $3,500 per year. The average income of the families served in the HAC Study is $9,600, which is below the poverty line.

NRHC Reccomendations

We urge the Committee to continue all rural housing loan programs at a level no less than that of fiscal '87. This freeze level will provide rural America with a minimum level of production necessary to continue the effort to improve substandard rural housing.

Of particular concern are rural housing programs targeted to very low income households. Recent data indicates that these are the families least served in the effort to improve rural housing. For example, according to the 1980 census, over 600,000 poverty level households live in units which are overcrowded or lack adequate plumbing. Programs such as self help housing technical assistance grants, home repair grants, and rental assistance are all important in the effort to house the poorest of the poor.

The average income of self help housing participants is 12% below that of the average section 502 borrower and in many states self help housing participants are all very low income.(Most self help families have incomes below the poverty line.) The sweat equity earned by the families working on the building of their own homes saves them at least $10,000 over a comparable contractor built house.

If 40% of the section 502 program funds are to go to very low income borrowers, as is required by law, it is esential that we have a strong self help housing program. We urge the Committee to continue self help technical asssistance grants at the current level of $8 million.

Largely because of this Committee's efforts, FmHA finally implemented the Rural Housing Preservation Program. Using monies originally appropriated in FY-84&85, FmHA funded over 100 public and private non-profit corporations to repair the housing of very low income rural Americans. The $19.14 million provided will result in over 4,000 units of rehabilitated housing in rural areas and will largely affect those unable to afford other FmHA housing programs.

Because of the President's proposed rescission, obligation of FY 87 funds has been delayed. However, FmHA expects to make grant awards presently and funds will be out in the field well before the end of the fiscal year. For FY '88 we urge the Committee to continue this program at the current level of $19.14 million.

Finally, we recommend to the Committee that funding for rental assistance be increased to $250 million. Requirements in the new tax law put a premium on serving people with incomes below 60% of the area median. In order to serve people with these incomes a deeper form of subsidy is needed or the developer must be willing to apply tax credits to subsidize tenants. As few are willing to do this, it is apparent that more rental assistance will be necessary.

Our recommendation includes renewing existing contracts and providing for about 10,000 new constructed units.

Mr. Chairman, we are grateful for your past support of rural housing programs and look forward to working with you in the future.

STATEMENT OF THE NATIONAL TAX EQUALITY ASSOCIATION

The Senate Agriculture Committee is faced with the difficult task of recommending a budget to the Congress in these difficult times of over-production in agriculture, declining income for individual farms and, of course, the ambitious task of meeting Gramm-Rudman budget deficit reduction targets of $108 billion. We very much appreciate the consideration of Members of the Committee on our views concerning the impact of federal goverment policy on one sector of the farm economy; the small business firms that support farmers with raw materials and implements to provide the means of production. Generally, we believe this economic sector of the farm economy has been largely forgotten in the debate over farm policy.

While many farms have been lost over the past few years, thousands of farmers have maintained operation through increased price supports and other payments by the federal government which have increased from $4 billion in 1980 to $28 billion in 1986. Dairy farmers who leave or are forced out of the business are paid by the government to exit; big businesses utilize losses in the farm sector to offset income in other areas of their multi-national conglomerates. Large farm co-ops are granted regulatory and tax benefits which have maintained their operation, although in many cases their gross income is in decline. But, the small family run or otherwise locally owned feed dealer, implement dealer, local hardware outlet or rural community insurance operation has had to suffer through the economic decline without the benefits of special federal programs. These small business owners are left to fend for themselves and many have managed to do just that.

While we do not have all the answers to our agricultural problems, this committee is aware of our general philosophy as outlined in past testimony. We oppose strict government control of farm economy and urge this committee to oppose such a program as proposed by Senator Harkin and Representative Gephardt. With world demand for agricultural products increasing each year, our government efforts would better serve the American farm economy if concentrated on expanding our share of world markets rather than limiting the capabilities of American agriculture. As far as addressing the explosive growth in farm programs, we have testified before, and repeat today, that real limits on federal dollars to large corporate farming operations must be devised and enforced. This would help reduce the growth of federal expeditures on farm programs. The Adminstration's proposal of a cap of $50,000 in payments to individual farms would save billions of dollars. Overall, the outlook for large reductions in the costs of farm programs is not good. We are not requesting that this committee add to the prospect of an increasing budget for agriculture on behalf of our small business members to help them deal with tough conditions in agriculture. Instead, we have some ideas that could reduce the costs to the federal government. In fact, the savings are substantial. As you might be aware, the proposals are not designed soley to help reduce the federal budget deficit, but are intended to address a major concern of small proprietary business firms in agriculture. From this perspective, the proposals are primarily intended to address competitive equity issues for our suppliers who compete with huge cooperative corporations.

Because a number of Members of this Committee are strong supporters of small business generally, you are aware that competition with non-profit firms is increasingly troublesome to small business owners. At the recent White House conference on Small Business held here in Washington last August, this issue was voted the number three top priority out of more than fifty issues. For agriculture non-profit or so-called non-profit competition means cooperatives. Last year, we worked for competitive equality by urging that the tax committees adopt tax reform without special treatment for cooperative corporations. We won a partial victory. Co-op firms are subject to the same new rules as most corporations. This is especially important as regards the new minimum tax. The minimum tax was designed to prevent any profitable corporation from totally escaping taxation, and we are gratified that co-ops were not granted any special exemption from calculating the tax.

Now, in a continuing effort to achieve equal competition, we urge you to take further steps to eliminate federal subsidy to cooperative firms.

The first issue on our agenda concerns a benefit worth millions of dollars to mostly large corporations that could easily afford some return to the government of an excise or user fee. The proposal has been submitted to the Congress before and last year was introduced as legislation by ranking Senate Banking Committee Member Jake Garn (R-Utah). The idea is to enact a user fee on the federally sponsored financing arm for cooperatives entitled the "Banks for Cooperatives."

The combined "Banks for Cooperatives" generated a net income of $200 million in 1986. Total loans to co-ops equaled $7.52 billion with nonaccrual components of only

$48 million. This indicates relative stability compared to other lending sectors in the financial industry. The Banks for Cooperatives borrowers benefit from lower rates due to the banks can raise captial at lower cost because of special agency status and tax exemption. The federal government should be reimbursed for this benefit and cooperatives should be weaned of their special interest rates not available to other taxpayers, especially proprietary farm suppliers. The user fee would raise almost $1 billion over five years.

We are aware of the political difficulties of such a proposal, but we have a remedy for the problem. It is expected by most observers of the farm credit scene that the Farm Credit System will soon propose to Congress a program to shore up the system with Federal loan guarantees and probably direct funding. In line with recent legislation considered by the Congress to recapitalize the thrift industry, a user fee on the "Banks for Cooperatives" should be viewed as a "self-help" measure. The funds raised from the assesment on the outstanding debt of the "Banks for Cooperatives" should be dedicated to the approximately $800 million that Farm Credit Administration Board member Jim Billington has stated may be necessary to assist the System with troubled loans. This idea would best serve the members of the farm credit system, the farmers, and simply move assets of one part of the system to a troubled segment of the system. There is ample precedent for this proposal and we would be happy to help committee staff develop such a proposal.

Tax Shortfall for Cooperatives Should Be Corrected

Additionaly, while we applaud the equal application of the minimum tax to cooperatives, the special dividend deduction allowed co-ops against regular tax liability remains in the tax code. Although the minimum tax will move co-op firms closer to the tax rates paid by competing corporations, the special deduction still allows tax advantage and costs the federal government revenues. We suggest that rather than proposing new revenues or tax increases, the committee first investigate eliminating special treatment for co-ops. The dividend deduction is allowed through Section 521 and Subchapter T for farm co-ops. It is clear that the intent of Congress years ago was to provide some tax benefit to new co-ops and limit the double taxation because it was envisioned that co-ops would maintain the characteristics of self-help organizations made up of farmer-members. It is not clear that Congress intended these benefits to accrue to large co-op corporations that have grown into million dollar and billion dollar multi-national firms.

If this committee and Congress is at all concerned with maintaining the viability of local communities and is really dedicated to limiting the concentration of economic resources, then these actions must be considered necessary to prevent destruction of small, locally owned farm businesses across the country. Limiting the special deduction to new co-ops or those retaining attributes of non-profit groups could save the taxpayers approximately $500 million according to figures published on revenue lost on tax exependitures.

STATEMENT OF JAMES E. MACK, GENERAL COUNSEL, PEANUT BUTTER AND NUT PROCESSORS ASSOCIATION

Members of the Subcommittee, I am James E. Mack and appear as General Counsel for the Peanut Butter and Nut Processors Association. This is a national trade association composed of peanut butter manufacturers and other processors of peanuts and suppliers of goods and services to the industry. This statement is submitted in behalf of the peanut butter manufacturers and the other peanut processors.

This is to invite your attention to what we believe amounts to absolutely contradictory policies of the Department of Agriculture pertaining to the export of peanut products.

For the 1986 fiscal year the Foreign Agricultural Service expended $910,000 in promotion of the export of peanuts and peanut products. At the same time the Department of Agriculture has in effect a regulation which results in the prohibition of the export of peanut products to Canada even without any Federal financial assistance.

The peanut program is a two-price program with the quantity of production of quota peanuts strictly limited for the United States market at a high price support. Export priced peanuts identified statutorily as additional peanuts in essence are a free market commodity. Anyone in any county in any state may produce any quantity of additional peanuts for export. There is a very low price support but the free market always results in the export free market price being more than double the support price.

If our manufacturers wish to acquire the export priced or additional peanuts for processing into peanut products, they may do so and may ship such products to any country in the world except Canada or Mexico. If the products are to be shipped to Canada or to Mexico then quota peanuts must be used and inasmuch as the additional peanuts most of the time sell for only approximately 55 percent of the price for quota peanuts, it effectively eliminates any potential for our manufacturers to sell in Canada.

Although the prohibition also applies to Mexico, it is of no significance because as a practical matter that country offers no export potential for United States produced peanut products. It would appear that Mexico is included only to confuse the issue, suggesting that geographical proximity is the reason for the regulation pertaining to the Canadian and Mexican prohibition. We are convinced that it is not the reason.

Unfortunately, in all countries of the world, except the United States and Canada, consumption of peanut products is tiny, but Canadians for a long time have been major consumers of United States peanut products. Many millions of pounds of shelled peanuts are exported annually to Canada, while at the same time the export of peanut products effectively is prevented. Canadian food retailers are anxious to have United States manufacturers of peanut products bid to supply their needs and cannot understand why our manufacturers are prevented by their own government from doing so. As you are aware, the time of so many high ranking United States government officials and much Federal money are expended to promote exports and yet our own Department of Agriculture prevents our selling our processed peanut products in Canada. It is hard to believe that the Department of Agriculture would discriminate against its own citizens.

For a long time it has been recognized that the best exports for the national economy are those which represent the most advanced stage of processing to benefit all segments of the economy. Our government will fuss with Japan, the EEC, Canada and others about discrimination against United States products and then the Department of Agriculture itself takes an action which has the effect of preventing our manufacturers from exporting peanut products to Canada. It becomes a case of one who lives in a glass house throwing stones.

In 1983 our Association appealed to the Department of Agriculture to change the regulation. Initially, informal meetings were held with high departmental and career officials. Those at the policy level appeared most receptive and encouraged the Association to formally petition the Department. This was done and a proposal was announced to accomplish this objective with comments invited. After the closing date of comments months elapsed and then ultimately the Department announced that it was not going to change the regulation. The reason assigned we feel was an absurd one. The reason assigned was that because of the geographical proximity of Canada, the potential for fraudulent reentry of the products into the United States existed. As it is believed it will be recognized quickly such a position entirely is unsupportable because the potential for fraudulent reentry of shelled peanuts which are exported is tremendously greater than the potential for the reentry of peanut products. The import restriction under Section 22 of the Agricultural Adjustment Act prohibits the importation of more than 1,709,000 pounds of peanuts in any 12-month period commencing August 1 of each year from all foreign countries combined, and this prohibition includes roasted and salted peanuts, although not peanut butter.

Should additional or export priced peanuts be used to process and package peanut butter in the United States, the name and address of the manufacturer would have to be placed on the package and to gain entrance into Canada, it would have to be labeled in French as well as in English. This would positively identify the product as being one of United States origin. Should there be an attempt at reentry, it should be quickly recognized and identified by the Customs Service at the port of entry. To the contrary, if shelled peanuts are exported to Canada, as many millions of pounds are exported each year, and they then are ground and processed into peanut butter, they lose their identity so the potential for fraudulent reentry is much greater.

Here is what we think happened that caused the Department of Agriculture to reach what we believe to be this unbelievable decision. It is our understanding that after the proposed change in the regulations in 1983, Canadian processors became alarmed and sent a delegation into the peanut producing areas of the United States. It is reported that they met with a number of peanut producer representatives and scared them greatly by stating that if peanut products should be allowed to enter Canada that they would either eliminate or severely reduce their purchases of United States shelled peanuts and instead would buy them from China or elsewhere. This position is illogical. It is disappointing that the domestic peanut producers accepted it. Business people usually do business on a business basis. It seems definite that Canadian peanut producers buy United States produced peanuts because of the geographical proximity providing for quick availability and delivery, and also because of the excellent quality control provisions in effect in the United States, and not because of a warmth of friendship.

Nevertheless, seemingly the United States producers accepted this threat at full value and instituted a campaign to defeat the reasonable request of United States manufacturers who buy about fifteen times the quantity of peanuts from them as do the Canadians and at a price most of the time which is almost double the price which the Canadian customers pay. The domestic producers preprinted postal cards addressed to the Department and distributed them throughout the producing areas. The signers of these postal cards in effect stated that without going into the details they were opposed to the proposed change to allow United States peanut processors to have access to additional peanuts in bidding on Canadian business. This in turn resulted in many Members of Congress being contacted from peanut producing areas, with strong opposition expressed by the Members of Congress possibly without some of them at least understanding the issue any better than we feel the peanut producers understand it.

Previously I stated that most people usually do business on a business basis and it seems that now that is what is beginning to occur concerning the purchases by Canadian peanut processors of shelled peanuts. The import statistics of shelled peanuts into Canada under Canadian Tariff Code No. 212 for 1986 and 1985 are as follows:

1986 Metric Tons (1102 lbs.)

Total	72,578	$66,965,000
U.S.	58,139	52,723,000
China	11,203	10,412,000

1985

Total	64,622	$55,631,000
U.S.	63,479	54,739,000
China	1,075	782,000

The sudden and tremendous increase by Canada of its purchases of shelled peanuts from China in 1986 over 1985 is striking. Part of this may be attributed to the short supply and poor quality of the United States 1986 crop, but from the statistics it would appear that only half of the increase may be so attributed. This is because while imports into Canada from China increased approximately 10,000,000 pounds in 1986 over 1985, United States imports decreased only 5,000,000 pounds. Presumably the price of Chinese shelled peanuts is even more attractive than the United States price for additional peanuts which in Canada cost only about 55 percent of the United States quota price. Seemingly the Canadians are giving more attention to the Chinese price in relation to the United States geographical proximity and quick service than was done before. United States peanut producers should realize, but seemingly they do not, that if United States peanut processors were to have access to additional peanuts that then they, the producers, would have assurance that the peanut products shipped to Canada from the United States would contain United States produced peanuts. However, if the peanut butter or other peanut products are manufactured in Canada the usage of peanuts from China and other countries could largely displace the usage by Canadian processors of United States produced peanuts.

This now leads to the final point which we suggest is causing significant injury to United States peanut producers because of their lack of understanding of the issue, even though we have tried diligently to make successfully the point with them. CPC International produces Skippy Peanut Butter. Planters Peanut Division of Standard Brands, which is part of RJR Nabisco, produces roasted and salted peanuts. They have factories both in Canada and in the United States. For their Canadian factories they buy the additional peanuts at the export price or approximately 55 percent of the United States price. For their products manufactured in the United States of course they must purchase quota peanuts at almost double the price. With the peanuts used in their Canadian factories costing only approximately 55 percent of the United States price, it should be possible for the products to be retailed in Canada at prices considerably below the United States price. Our market testing has shown that such is not the case, but that instead their products purchased in Canada sell for approximately the same price per ounce as do the same products purchased in the United States (sometimes moderately less, in other instances moderately more). We are convinced that if our manufacturers in the United States were allowed to purchase these export priced peanuts and process them into peanut products in the United States and sell them in Canada, then there would be major price competition with the probable result of much lower prices for peanut products to Canadian consumers. If the price should go down substantially, which seems overwhelmingly probable under the circumstances, the volume would increase significantly and result in more peanuts being sold. This would provide a material benefit to United States peanut producers.

We feel badly that peanut producers seem to believe that anything United States manufacturers recommend must be bad for them without considering carefully the merits because in this instance if they would do so we feel they would join us and enthusiastically support what we seek rather than oppose it. Nevertheless, we feel that the Department of Agriculture should do what is right when the facts are so clear rather than taking a more comfortable, expedient position. Inasmuch as the Department has failed to do so, we believe that future expenditures of the Foreign Agricultural Service should require that the Department not have a contradictory policy -- that is it should not spend money to promote exports to all countries, except Canada and Mexico, and then have a regulation which in effect prevents export of peanut products to Canada even without the employment of Federal funds. Stated otherwise, it is believed that the appropriation for the next fiscal year to promote peanuts and peanut products should require that the Department change its regulation so that the availability of additional peanuts for processing into products be the same for Canada as currently is in effect for other countries.

STATEMENT OF LLOYD A. SCHMIDT, EXECUTIVE VICE PRESIDENT, RED RIVER VALLEY POTATO GROWERS ASSOCIATION

The potato industry in the United States is one of the very few commodities that has not found it necessary to get deeply involved in any farm subsidy programs. In fact, the potato industry, as a whole, has fought many battles against diversion programs and other attempts to include the industry in federal subsidies no matter how minor they may be.

The most recent example was our successful effort in getting potatoes eliminated from the former 50-92 provisions in the 1985 Farm Bill. The best brains in our industry were unified in their conclusion that this program could have resulted in a ruined potato industry that could have ended up looking to the government for future financial assistance.

The potato industry in this country has been built on "free enterprise" and "supply and demand". It will be maintained on the same basis. Some years we make it and some years we don't, but it averages out to a living unsubsidized by anyone.

However, there is one area in which we have received federal assistance and are in a situation where we could use more and that is in research. The total federal research bill for potatoes is presently at $5,000,000 annually, which we feel is much - much too low for a crop that receives no other assistance. The Red River Valley Potato Growers Association is one organization that would not be ashamed to say that this effort should be at least four times that amount from our federal government. We say this even after considerable thought is given to your budget and deficit problems. I do not have any numbers to show what the industry pays in addition to this $5,000,000, but it is very sizeable indeed.

✓ The potato industry has always and will always attempt to solve as may problems as they can by themselves. Twenty million dollars, we feel, would be a very small price to pay to maintain an industry that works extremely hard not to be federally subsidized. I am aware that requests for additional funding will be made to you for next year and succeeding years.

Now, Mr. Chairman and members of the Committee, I would like to bring this down to one specific problem which must be faced by the federal budget process and U.S.D.A./A.R.S. in particular.

In approximately 1964, the leadership in the Red River Valley of North Dakota and Minnesota saw a national need in the potato industry and that was the total lack of research on storage, handling, and other pre-harvest and post harvest problems of the industry and its processing side. Seeing this need, those growers set their sights to finding a solution and they did. The solution turned out to be something very innovative, cost effective and very workable.

The potato growers in North Dakota and Minnesota took it upon themselves, for the national good, to build a 12,760 square foot building and then deeded the building and the land over to federal government and U.S.D.A. to do this type of research. The United States Department of Agriculture in turn put the machinery in place that was required to do the research needed by the nations growers as well as some of the scientists. Further, North Dakota State University and the University of Minnesota also agreed to supply scientists, technical support and operating funds to the laboratory.

As the fourth member on this Cooperative Memorandum of Understanding, the Red River Valley Potato Growers Association supplies operating funds for some of the research projects each year. Our largest contribution each year includes such things as a 4,032 square foot addition to the Processing Laboratory as well as a 7,700 square foot potato storage building, also attached to the laboratory in which U.S.D.A. does their Potato Storage Research. Further, the Red River Valley Potato Growers Association also supplies up to 15,000 cwt. of potatoes each year to the laboratory for this research and also operates a research farm free of charge to all potato research personal so that they have the land on which to take care of their potato growing research needs. On top of all of this, we also contribute approximately $150,000 in cash each year to the University of Minnesota, North Dakota State University and U.S.D.A./A.R.S. to help take care of our own local states needs in potato research, such as varietal development.

Members of the Committee, we do not bring all of this up to brag about our involvement. Maybe some areas do even more than we do as their fair share. We bring it up only to try and convince you that we in the Red River Valley are doing what we can to contribute to the national needs of potato growers and that we now need additional help. In the last ten years the funding from U.S.D.A./A.R.S. for its national laboratory in East Grand Forks, Minnesota, has gone from $301,100 in 1978 to $371,900 in 1986. For 1987, the current year, the laboratory is at $353,737. This is an actual dollar amount. I'm not going to bore you with a long explanation as to the various ways in which these actual dollars shrink an operation each year that they are not increased. You know this better than I. Suffice it to say that we are now down to a point where in order to pay the fuel bill, we have to start eliminating scientists. Without sizable increases, this will definitely begin next year. Dr. Kinney, who I should say has been very sympathetic to our needs, has redirected some funds to hold off those lay-offs for one more year in order for us to make this plea to you.

Mr. Chairman, I hope that I have sufficiently convinced you and the members of your committee that given the financial support that U.S.D.A. gets from the University on Minnesota, North Dakota State University, the Red River Valley Potato Growers Association and other industry supporters, agricultural research out of the U.S.D.A. laboratory in East Grand Forks, Minnesota gets more bang for the Federal dollar than any laboratory in their system.

Before I tell you what we need, I want to apologize for having to ask. We are fully aware of your budgeting problems and are sympathetic to them. We only have one choice however, and that is to request a budget enhancement of $250,000 annually. Again believe me when I say we are sorry we have to ask, but also, believe me when I say we have no choice.

Ourselves and others, such as the processors, have done our part in keeping up some of the machinery, adding machinery, and equipment they need at the U.S.D.A. Laboratory and re-modeling the facilities as needed. We now need you. The potato industry needs the federal laboratory in East Grand Forks, Minnesota to continue the work that needs to be done. Without the infusion of the $250,000 annually, the Laboratory will become a dying patient instead of the vibrant contributor it has been in the past.

We urgently request that you give our request your favorable consideration.

Letter From James J. Lenihan, Chairman, Board of Directors, Santa Clara Valley Water District

March 24, 1987

Senator Quentin N. Burdick, Chairman
Senate Appropriations Subcommittee on
Agriculture, Rural Development and Related Agencies
United States Senate
140 Dirksen Senate Office Building
Washington, D.C. 20510-6025

Dear Chairman Burdick:

The Santa Clara Valley Water District, sponsoring resource conservation districts, and local cities in the Santa Clara County, are extremely concerned over continued proposals of the Administration to eliminate watershed planning and flood prevention programs of the U.S. Soil Conservation Service (SCS). We are strongly opposed to the proposals for elimination of these programs in the President's fiscal year 1988 budget.

The ongoing P.L. 566 Small Watershed Program of SCS in Santa Clara County, California is vital, with respect to flood control and agriculture, and must continue to be assured. We simply cannot afford the immense financial burden and flood hazards which would otherwise result should such assistance be terminated.

The magnitude of our concerns can best be illustrated by the fact that, in this County alone, we are currently cost-sharing with SCS on over $40 million in flood control improvements which are under construction. Further, cost-sharing is anticipated on another $27 million in similar improvements which are now in various stages of planning or design.

It continues to be our view that the Administration's proposals relative to SCS are perhaps shortsighted. Although we certainly support the goal of balanced budgets and a reduced deficit, we disagree with attempts to do so at the expense of such sound, low cost, long-term programs as those so effectively administered by SCS.

SCS has consistently attempted to minimize requested appropriations in efforts to help reduce overall federal spending while keeping its many cost-effective programs intact. However, the drastic cuts now proposed would essentially eliminate its role as one of the most effective water resources agencies (with one of the highest project construction to planning ratios) in the nation.

We therefore urge your strong support for appropriations in fiscal year 1988 and thereafter that will ensure the Soil Conservation Service's very important and essential continuing role in conservation and resource protection nationwide.

Sincerely,

James J Lenihan

James J. Lenihan, Chairman
Board of Directors

STATEMENT OF JACK R. MILLER, PRESIDENT, SOCIETY FOR RANGE MANAGEMENT

The Society for Range Management is a conservation organization dedicated to the wise management of the rangelands of all nations. It is also a professional society in the full sense of the term. It is from that twin perspective that we offer the following comments and recommendations on the 1988 budget proposals for Department of Agriculture agencies with programs including rage management activities.

Research is the very foundation on which programs for improved range management are built, but the proposals for funding range research in the budget before you are modest indeed. We recommend:

For the Cooperative State Research Service: $500,000 for special grants for range management research. This has been an effective program attracting numerous high quality proposals. Only 6 of 70 proposals could be funded in 1987.

For the Agricultural Research Service: $9 million for range management research. In addition, we urge funding of the germ plasm research activity, a portion of which will favorably impact the range research program in the long term.

Extension in natural resources management including range management is a critically important means by which new knowledge and techniques can be translated into action on farms and ranches to enhance basic resource values. The importance of extension in natural resources is underscored by the conservation provisions of the Food Security Act of 1985: the effectiveness of those conservation provisions will depend in part on the quality of information available to producers and the strength of the delivery service which transmits it. We therefore recommend:

For the Cooperative Extension Service: $237,594,000 in Smith-Lever 3b and c as provided in the President's budget. In addition we urge funding under the Renewable Resources Extension Act at $4 million, a level at which all states could be expected to participate.

While the Administration budget provides for gearing up to implement the conservation provisions of the 1985 Farm Bill, it does so at the expense of some proven effective conservation programs. At the same time we recognize that there is some substitutability between existing activities and farm bill conservation provision activities, particularly to the extent they affect the same lands. In view of this, some increased funding will be required, although not as much as if there were no overlap in existing and new programs. We recommend:

For the Soil Conservation Service: The supplemental appropriations bill adopted by the House Committee provided for 5 percent of the Commodity Credit Corporation funds available for the Conservation Reserve Program to be used for technical assistance related to the added workload from the Food Security Act of 1985 in addition to the $1 per acre transfer related to CRP signup; this pattern or equivalent funding based on determined workload should be followed in FY 1988. It is important to maintain SCS capability to carry on established effective programs in such areas as Emergency Flood Repair, and the Great Plains program.

For the Agricultural Stabilization and Conservation Service: The 1987 level of $176.9 million, which has included $13.5 million for range management practices in 17 western states, should be restored. This program complements farm bill conservation provisions to a major extent. The $11.9 million Forestry Incentives program should be restored; this program affects lands in different categories than those impacted by the Conservation Reserve Program.

Thank you, Mr. Chairman, for the opportunity to briefly present our views and recommendations to the Committee.

STATEMENT OF KARL M. BACKES, PRESIDENT, TEHACHAPI-CUMMINGS COUNTY WATER DISTRICT

My name is Karl M. Backes, and I am president of the Tehachapi-Cummings County Water District. Once again, I am writing to urge your support for restoring funds in the Department of Agriculture's Soil Conservation Service programs. Our specific concern is the P.L. 566, or Small Watershed Act, programs, and the Tehachapi Watershed Project in Kern County, California.

In addition to the Tehachapi-Cummings County Water District and the Kern County Water Agency, Tehachapi Watershed Project sponsors include the Tehachapi Resource Conservation District and the City of Tehachapi. To date, these local sponsors and local taxpayers have spent about $700,000 on the project. After work funded by the current fiscal year budget is finished, the Tehachapi project will be about one-half complete, with the Antelope Dam component of the project finished, along with half of the flood channel and diversion facility work.

The federal government has spent $5.2 million to date on the project, which includes $1.7 million in current Fiscal Year 86-87 funds. These funds are being used to complete construction of the Antelope Unit diversion facilities. Fiscal Year 87-88 funds will be used to begin construction of the Blackburn Dam Unit of the project. (It should be noted here that local interests have earmarked about $250,000 that will be spent this year on lands, easements and rights of way before the federal government will award a contract to begin construction of this next phase of the project.) Altogether, the Soil Conservation Service estimates another $5 million is necessary to complete the project.

The Tehachapi Watershed Project has a strong benefit-to-cost ratio of 1.3 to 1, and is considered one of the top priority projects in the state by the California Soil Conservation Service office. As I noted last year, to stop this project at this point and leave it half-completed, as the President again proposes to do in his budget for Fiscal Year 87-88, would be a total waste of considerable federal and local funds.

I would like to take this opportunity to express our appreciation for your long-time support of the Soil Conservation Service and its watershed protection programs. These projects have proven to be among the most beneficial and cost-effective in the nation, providing real service in areas of real need. We urge your continued support for the national Soil Conservation Service watershed protection programs, and specifically to restore funding to at least complete those projects already under construction. If they are not completed, no benefit can be realized from the considerable local and federal expenditures that have already been made.

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